WETLANDS CONSERVATION

HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

OF THE

COMMITTEE ON MERCHANT MARINE AND FISHERIES HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

DISCUSSION OF STEPS THAT OUR NATION SHOULD TAKE TO HALT THE CONTINUING LOSS OF WETLANDS

MAY 17, 1989

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WETLANDS CONSERVATION

WEDNESDAY, MAY 17, 1989

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:15 p.m., in room 1334, Longworth House Office Building, Hon. Gerry E. Studds (chairman of the subcommittee) presiding.

Members present: Representatives Studds, Carper, Bosco, Ortiz, Tallon, Pallone, Unsoeld. Hutto, Tauzin, Dyson, Schneider, and Weldon.

Staff present: Gina DeFerrari, Bill Woodward, William Stelle, Lisa Murray, Joyce Sacco, Sue Waldron, Tom Melius, and Rod Moore.

OPENING STATEMENT OF HON. GERRY E. STUDDS, A U.S. REPRESENTATIVE FROM MASSACHUSETTS, AND CHAIRMAN, SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

Mr. STUDDS. The Subcommittee meets this afternoon to discuss the steps that our Nation should take to halt the continuing loss of wetlands. The value of wetlands has been well documented. They provide outstanding habitat for fish and wildlife, help control flooding in low-lying areas, maintain water quality by filtering out pollutants, control erosion, recharge aquifers, provide a source of timber, and are widely used for recreational purposes.

They are also disappearing. We lecture the developing world every day about the need to conserve tropical forests, but wetlands are a priceless national resource in our part of the world, and I doubt we will ever succeed in persuading others to meet their environmental responsibilities if we do not meet our own.

President Bush has proclaimed a policy of "no net loss" of wetlands. He has promised to create an interagency task force to carry out that policy, but in the first 120 days of his administration, that task force has not met, that policy has not gone forward, and those promises have not yet been kept.

Our first panel this afternoon is made up of representatives from the Federal agencies that will presumably carry out the administration's policy, once the administration has a policy to carry out.

Our second panel will focus on agricultural development, which is the number one cause of wetlands loss in our nation today.

Our purpose is to begin a discussion that will lead either to legislation or to strong administrative action to protect the swamps,

marshes, bogs, fens savannahs, sloughs, swales, pocosins—in the Chairman's State—potholes, vernal ponds, bottomlands, and seeps—especially the seeps—that are so important to our country and so much a part of our culture and our way of life.

Without objection, the statement by Mr. Davis will be in the record.

[The statement of Mr. Davis follows:]

STATEMENT OF HON. ROBERT W. DAVIS, A U.S. REPRESENTATIVE FROM MICHIGAN

Mr. Chairman, I thank you for holding these hearings for I am hopeful it will provide an opportunity for all of us to learn more about the regulatory regime governing wetland conservation in our Nation.

The loss of wetlands throughout the United States has been a major concern of many of us on this Committee. Prior to settlement by the Europeans, it was widely accepted that the United States contained as many as 215 million acres of wetlands, but by mid-1970 only 99 million acres remained. The Nation had lost 54 percent of its wetlands, and losses to agriculture and to commercial and residential development have continued.

This loss is also prevalent in my home state of Michigan, for prior to the arrival of European settlers there, it has been estimated that the State contained approximately 11.2 million acres of wetlands. A recent study by the U.S. Fish and Wildlife Service though now estimates that only 3.2 million acres remain—a loss of 71 percent of its wetlands. Some coastal areas have lost an even larger percent. Lake St. Claire, for example, has lost an estimated 80 percent of its wetlands.

Long perceived as wastelands with few redeeming characteristics, wetlands today are being recognized as valuable natural resources. They provide habitat for a wide variety of plants and animals, probably the most commonly recognized value of wetlands. But they have been shown to provide many other valuable functions such as the maintenance of water quality. They can retain, at least temporarily, nutrients that would otherwise reach streams, rivers, or lakes and contribute to increased growth of algae. Sediments that are suspended in running water can also be removed by wetlands. Wetlands interconnected with the groundwater table can recharge groundwater while in other areas discharge groundwater. Wetlands also provide a valuable function by reducing the severity of floods. They are effective as a storage basin during times of heavy rainfall and ease in the flooding of rivers. Finally, wetlands provide a multitude of use for recreational activities; hunting, fishing, and a number of nonconsumptive uses of wetlands are enjoyed by many Americans.

The major Federal regulatory program controlling the destruction of wetlands is authorized by Section 404 of the Clean Water Act, which requires the issuance of a permit from the Army Corps of Engineers for the discharge of dredged or fill material into the waters of the United States, including most wetlands. Michigan, through its Department of Natural Resources, assumed administration of the Section 404 wetlands program in August of 1984, and for most waters only a state permit is required. At the center of Michigan's wetland management program is the Goemaere-Anderson Wetlands Protection Act of 1979. This Act, along with several other wetland conservation Acts, provides the regulatory regime for management of wetlands in the State of Michigan. Michigan is the only state in our Nation to have responsibility of state management of its wetlands. The program has been handled very successfully for it can respond effectively through the permitting process to the needs of its local constituents. The processing of applications and the enforcement of regulations does place an additional responsibility on state government though Michigan has been able to meet this challenge.

Overall, the regulation of wetland use is typically the focus of most wetland protection efforts. This focus is generally at the Federal level, however, protection of wetlands is not only a Federal responsibility, for there are roles that many state and local governments, conservation groups, and individuals can play as we seek ways to best protect our valuable wetland resources. Our understanding of the public benefits inherent in these resources continues to grow as does our knowledge of the losses and expenses suffered by the public as these areas have been destroyed.

As a Member who wants to assist in wetland conservation, I have introduced H.R. 2322, along with our Full Committee Chairman, Walter B. Jones, and Ranking Subcommittee Member, Don Young, to further the implementation of the North American waterfowl management plan. This plan, signed in 1986 by the Minister of Environment for Canada and Secretary of the Interior for the U.S., outlines a far-reaching joint effort to identify the major management problems, establish objectives, and

propose a series of strategies to protect waterfowl habitat, restore declining waterfowl populations, and enhance waterfowl research and management. Saving wetlands for waterfowl also protects these areas for hundreds of other species.

Mr. Chairman, this legislation is but one part of our effort to protect wetlands. I am hopeful that the hearings that we have embarked upon will add to the overall understanding of the regulatory and nonregulatory processes available for protecting wetlands and will assist us as we become more involved with wetland conservation.

Mr. STUDDS. Are there opening statements on this side?

The gentleman from New Jersey.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A U.S. REPRESENTATIVE FROM NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman. I just wanted to say that I am very pleased that you are having this hearing and that you are emphasizing solutions, possible legislative solutions, because I know that in my district in particular, in New Jersey, that the issue of wetlands destruction is of particular significance. Every day—I shouldn't say every day, but very often—I get complaints about wetlands that are being filled in, that are being destroyed, even though we supposedly have a Federal and even a State program that should not allow for that, and so I would like to see what we can do, as a Committee and as a Congress, to rectify the situation.

Thank you.

Mr. STUDDS. The gentlelady from Washington.

OPENING STATEMENT OF HON. JOLENE UNSOELD, A U.S. REPRESENTATIVE FROM WASHINGTON

Mrs. UNSOELD. Thank you very much, Mr. Chairman.

Just to say that the importance of this often—too often—overlooked issue is beginning to seep into the public consciousness, and I appreciate your leadership.

Mr. STUDDS. Did the gentlelady say "seep"?

Mrs. UNSOELD. Yes.

[Laughter.]

[The statement of Hon. Billy Tauzin follows.]

STATEMENT OF HON. BILLY TAUZIN, A U.S. REPRESENTATIVE FROM LOUISIANA, AND CHAIRMAN, SUBCOMMITTEE ON COAST GUARD AND NAVIGATION

Mr. Chairman, I am very grateful to you and the Subcommittee for its efforts to focus attention on the serious national problem of wetlands loss. This hearing, while the first for the Subcommittee in this Congress, is not the first effort by the Subcommittee to investigate the issues related to wetlands loss. The subject of wetlands losses was part of the Subcommittee's extensive investigation of coastal pollution, included in amendments adopted by the Full Committee in other legislation, and the focus of numerous meetings at the staff level with Federal and State officials responsible for wetlands regulation and stewardship.

I have a great personal interest in seeing progress on wetlands policy reform. From my earliest years in elected public office, I have been trying to rally local, state, and national support for a comprehensive national strategy to combat coastal wetlands losses, particularly in Louisiana. As the background memorandum correctly points out, the coastal wetlands loss in southern Louisiana is "an especially severe problem." The rate of loss of 50 square miles per year in this area represents eighty percent of the coastal wetland loss nationwide. But it is even worse than that—most of that loss occurs in a single congressional district. And it happens to be the one I represent. I may be the first Member of Congress to lose his district not by death, defeat or resignation, but by erosion!

Mr. Chairman, America's largest wetland community is losing its marshes and swamps to the Gulf of Mexico. Wetlands are being replaced by open water, largely as a result of natural forces and the combined impact of Federal navigation policy, flood control systems and other activities, such as opening canals for the development of mineral resources. There is, perhaps, a need for clarification of the extent of wetlands losses in Louisiana.

To underscore the severity of wetlands losses in Louisiana, the following passage may be instructive. It comes from an often-overlooked April, 1987 report by the Environmental Protection Agency entitled "Saving Louisiana's Coastal Wetlands":

> "If current trends continue, an ecosystem that supports the Nation's oldest bilingual culture, 25 percent of the Nation's fishing industry, and North America's largest fur-producing area, will be destroyed in the next century. This destruction could be further accelerated if sea level rises one or more feet as a result of the projected global warming from the greenhouse effect."

That report made nine specific conclusions, which I have included at the end of my statement. I believe these conclusions support the notion that this Congress can and should act on legislation that deals only with the crisis we face, as a Nation, in Louisiana's coastal wetlands. That EPA report also concluded that "wetlands loss in Louisiana is a problem with national importance." In reaching that conclusion, it noted that, and I quote: "unlike wetland loss elsewhere which mostly results from private actions, the coastal wetlands loss in Louisiana results primarily from activities conducted or authorized by government agencies."

The same report called for a comprehensive plan of action. Senate Bill 630, authored by Senator John Breaux, the distinguished former chairman of this Subcommittee, goes a long way in setting up a framework within which an action plan can be developed. The funding mechanism provided in S. 630—a permanent appropriation of 5% of OCS revenues—may be controversial, but I must point out that most Federal OCS revenues come from activities directly off the Louisiana coast. In fact, 90% of all Federal OCS revenues comes from development in the Gulf of Mexico and represent the single largest source of Federal revenues after payroll tax deductions.

Earlier this year, the Department of the Army, the Fish and Wildlife Service, the Environmental Protection Agency and the Soil Conservation Service adopted the new "Federal Manual for Identifying and Delineating Jurisdictional Wetlands," which became effective on March 20 of this year. It is the first time Federal agencies have attempted to use a single approach to determining wetlands subject to Section 404 of the Clean Water Act. But the definition is so broad that most of the lands in coastal Louisiana, including the vast majority of those lands already developed, could fall within the jurisdiction of the Clean Water Act. To make matters worse, the EPA's 404(b)(1) guidelines which presume the availability of non-wetland sites for non-water dependent activities when considering of 404 permits is, at best, illusory when applied to coastal Louisiana.

In dealing with the enormous and unique coastal wetland environment of Louisiana, if this Congress blindly adopts the Manual's expansive definition of jurisdictional wetlands and does not question the EPA's presumption that non-wetlands sites exist for non-water dependent development, then we might as well tell the two million people who live and work in coastal Louisiana to pack up and move. Even though the historic and continuing rationale for the existence of communities in coastal Louisiana is water-related, under currently emerging Federal policy they cannot hope to build schools, churches, highways, and other essential infrastructure needed to support their growing communities because those facilities are not water-dependent and they will have an impact on wetlands.

Mr. Chairman, what is perhaps saddest about the emerging Federal regulatory regime is the fact that even if it is used to halt all developmental activity in coastal Louisiana and pronounce a death sentence for those communities who depend upon such development for their very survival, Louisiana will continue to suffer staggering coastal wetland losses. Even if every 404 permit application submitted for developmental activities in Louisiana was approved, the impact on wetlands would be insignificant and almost immeasurable compared to the wetlands losses caused by natural forces such as subsidence, salt water intrusion, tidal erosion, and the loss of sediments from the Mississippi River.

The wetlands of coastal Louisiana were developed over thousands of years by sedimentation from the Mississippi River. Over two-thirds of the waterways of the lower 48 states drain through the Mississippi River, which the Federal Government has leveed for navigation and flood control purposes, without providing for sufficient

water diversion projects to nourish the wetlands these levees have cutoff. There are a few Federal water diversion and marsh creation projects in place in Louisiana, and they have proven extraordinarily successful in creating wetlands. But to expand these projects to the extent needed simply to compensate for the wetlands losses directly attributable to Federal activities will cost a considerable amount of money—more money than the Administration and the Congress are probably prepared to give to this effort. And even with full funding of these projects, Louisiana will still experience wetland losses.

In recognition of this fact, EPA Administrator William Reilly stated in recent Senate testimony that it would be extremely difficult to apply a "no net wetlands loss" policy to Louisiana. Yet, he is offering no meaningful alternative. The only alternative that has a chance of working is embodied in the State/Federal management regime envisioned by S. 630 and which forms the basis of legislation I will soon introduce that further clarifies the authority and responsibility of the State of Louisiana in developing and implementing a coastal wetlands management plan.

Mr. Chairman, in the weeks ahead, I will offer a bill that can bring some hope to the people whose very existence and whose heritage is inextricably linked to the wetlands of Louisiana. I ask that you consider legislative hearings on that bill this year. To be sure, there are wetlands in the United States that will survive and flourish if only man's activities in them is restricted. However, in the vast coastal wetlands of Louisiana, we need a completely different policy structure, one that recognizes that, like a critically wounded patient, these wetlands need intensive care that cannot and, apparently, will not be given under existing law.

Mr. STUDDS. Let the Chair observe there is an unusual number of people. If anyone who is without a seat would like to come and sit around this first level here, you are more than welcome to do so before we get started, especially those of you who have to write. We make the usual pledge that no one will accuse you of working here, so you are perfectly free to come in.

[Laughter.]

Mr. STUDDS. The first panel has five people in it. Is that correct? As I understand it, you have sworn an oath to the staff that your oral presentation will take no more than 5 minutes. Your written presentations will appear in full in the record, and we will go—unless you have a problem with it—in the order in which you appear on the witness list, beginning with Mr. David Davis, Director of the Office of Wetlands Protection from the EPA.

Mr. Davis?

STATEMENTS OF A PANEL, CONSISTING OF MR. DAVID G. DAVIS, DIRECTOR, OFFICE OF WETLANDS PROTECTION, U.S. ENVIRONMENTAL PROTECTION AGENCY; DR. RALPH MORGENWECK, ASSISTANT DIRECTOR FOR FISH AND WILDLIFE MANAGEMENT, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR; MR. JOHN CAMPBELL, DEPUTY UNDER SECRETARY FOR INTERNATIONAL AFFAIRS AND COMMODITY PROGRAMS, U.S. DEPARTMENT OF AGRICULTURE; DR. WILLIAM H. HOOKE, EXECUTIVE DIRECTOR, OFFICE OF THE CHIEF SCIENTIST, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION; AND MR. JOHN S. DOYLE, JR., PRINCIPAL DEPUTY ASSISTANT SECRETARY OF THE ARMY [CIVIL WORKS], DEPARTMENT OF THE ARMY

Mr. DAVIS. Thank you, Mr. Chairman. Good afternoon.

As you noted, Mr. Chairman, the administration is committed to improving the protection and management of this Nation's wetlands. President Bush, in his 1990 budget statement, called for a goal of "no net loss" of wetlands. Achieving this goal will be no

small and easy task, and will require cooperation and action from each level of government, along with the private sector.

Although considerable progress has been made in the effectiveness of wetlands protection, both at the Federal and State levels, new pressures are arising which challenge each step forward. Continued population growth and development pressures and cropland values bring increased pressures to convert wetlands for agricultural purposes.

Much of the recent increase in awareness and concern for wetlands issues can be attributed to the work of the National Wetlands Policy Forum. The forum report points out the complexity of wetlands issues as well as the solutions, and concluded that all sectors of society must play an active role in order to bring the problems under control.

On the Federal level, the President has asked the Domestic Policy Council to establish an interagency task force on wetlands to recommend ways to revise and strengthen the current presidential Executive order on wetlands, and to do certain other things that are not yet determined. EPA will be an active participant in this task force.

The issues include how to interpret and achieve the "no net loss" goal. Such a goal does not imply that every wetland will be untouchable in all cases. We recognize that there are going to be circumstances where some wetland loss will have to continue to be sustained, but the point is we are trying to find ways to minimize that and to compensate for it.

Another difficult issue for the interagency task force is how to monitor and assess progress toward achieving the goal. Restoration of previous wetlands will be a key factor in addressing this problem.

One particularly ripe area to encourage restoration efforts, as many of you would note, is coastal Louisiana where the loss rates of 40 to 60 square miles a year are quite unacceptable. Responding to these losses as part of its overall efforts to protect coastal waters, EPA has in fact been working in that area, contributing funding to the State for projects to divert sediments, to build and vegetate terraces to restore coastal wetlands, and we have been working to possibly establish a national estuary program in Barataria Bay.

Agricultural areas also are particularly appropriate for wetlands restoration. We have been working with the Department of Agriculture to identify stronger linkages between water quality goals and programs like the Conservation Reserve. We are also exploring potential changes to the 1990 Farm Bill with the USDA, to enhance opportunities to protect and restore wetlands.

Within the regulatory program, EPA approaches wetlands restoration and creation to replace natural wetlands with caution. The problem with relying too heavily on the restoration or creation of wetlands to offset losses of existing natural wetlands is the very high degree of risk still associated with such attempts, so it is an area that we believe should be approached very carefully and very slowly.

In January, former Administrator Lee Thomas issued a wetlands action plan for the agency, describing short-term actions we can

take to help implement certain recommendations of the National Wetlands Policy Forum. They fall in a series of categories which are laid out in my full testimony.

A couple of things I would like to highlight before I close: We have been working actively with the Army Corps of Engineers to improve the effectiveness and efficiency of the 404 program. That culminated in the development of two memoranda of agreement in January, one on jurisdiction and one on enforcement; and with the Corps, the Fish and Wildlife Service, and the Soil Conservation Service, also in January we developed a joint delineation manual.

We have also been expanding our efforts in the area of advance identification of wetlands, which we believe is an important way to get our arms around wetlands in a more geographic, watershed, or natural ecoregion context.

We are also trying to integrate wetlands into all of our programs. EPA, like many agencies, has multiple programs, not all of which have wetlands as their primary objective. We are trying to work to increase the level of sensitivity and understanding of the wetland problem in all of our programs, and take steps to adjust them accordingly, so that they will be helpful and certainly not hindering.

We are also working with other State, Federal, and local agencies to foster the use of comprehensive planning—in particular things like multiobjective river corridor management—as a way of pulling together many different societal and environmental objectives. We feel that through this kind of a process we can make a lot of headway in terms of assuring that, in these areas of high environmental value and high environmental impact, we stop working at cross purposes and we do everything possible to bring our programs, all of our programs at all levels, into line. We have an active project of that sort trying to integrate work along the Delaware River corridor with the Delaware estuary. We think that is a very promising approach.

And, finally, we are working to integrate wetlands more effectively into the water quality management program. Historically, water quality programs have looked primarily at chemical water quality in the water column. They haven't paid much attention to the vegetated wetlands, for a variety of obvious reasons.

We are trying to rectify that. We have several State pilots going on to look at the use of wetland-specific water quality criteria. We have research programs going on to try to develop better criteria for those uses, and we are also developing a handbook for States on how to apply water quality certification to wetland protection.

So we have many different kinds of things going on. My full testimony contains many more, and in the interest of time I will conclude my remarks. Thank you for the opportunity.

[The statement of Mr. Davis can be found at end of hearing.]

Mr. STUDDS. Thank you, Mr. Davis.

Next, Mr. Ralph Morgenweck, Assistant Director for Fish and Wildlife Enhancement of the Fish and Wildlife Service.

Mr. Morgenweck?

STATEMENT OF DR. MORGENWECK

Mr. MORGENWECK. Mr. Chairman, thank you for the opportunity to discuss the wetland conservation activities of the Fish and Wildlife Service and ways we can work together to end the destruction of our Nation's wetland resources.

Wetlands are among the most biologically diverse and productive ecosystems. The effects of wetland losses in the U.S. that have concerned natural resource professionals for decades have now helped to generate concerns of the general public, as well. You are certainly aware of the statistics on wetland loss: Well over half of the 215 million acres of wetlands which existed in the U.S. at the time of European settlement have been lost, and wetland losses continue at a level as high as 450,000 acres per year.

The Service fully supports the goal of "no net loss" of wetlands as enunciated by President Bush. Many of the concepts related to this goal have been at the forefront of the Service's wetlands activities.

My formal statement describes many of the activities with which the Service is involved in protecting, managing, restoring, and enhancing wetlands. Our activities range from mapping and trend studies, to activities aimed at reducing wetland loss, to restoring and enhancing wetlands.

Our National Wetland Inventory is a comprehensive, ongoing survey of our wetland resources nationally. The Lower 48 States will be completely mapped by 1998, and Alaska will be completed soon thereafter.

Efforts in conjunction with the Department's Office of Program Analysis have resulted in a major review of wetland losses attributable to Government programs, and recommendations to make these programs more compatible with wetland protection.

Efforts to reduce wetland losses are also manifested in our interagency activities, where we review about 10,000 individual public notices each year related to the Clean Water Act's Section 404 permit program and provide recommendations to the Corps to mitigate wetland-related impacts. We also provide technical assistance to the Corps and to the Bureau of Reclamation on Federal water projects, and we have been actively working with the Department of Agriculture and farmers to implement the swampbuster provisions of the 1985 Farm Bill.

As part of our wetland restoration efforts, nearly 16,000 acres of wetlands were restored in 1988, and a restoration goal of 20,000 acres has been set for 1989. This is in addition to our many years of restoration efforts on our National Wildlife Refuges.

Activities undertaken to implement the North American Waterfowl Management Plan, an agreement signed by Canada and the U.S., have targeted more than 5 million acres of key waterfowl habitat for protection in the U.S. and Canada.

I would be remiss if I did not mention other wetland activities of the Service. These include studies of contaminants in wetlands, habitat-related activities under the Endangered Species Program, State acquisition of wetlands under our Federal aid program, ongoing land acquisition with revenues from the migratory bird conservation fund, and various studies in our Research Division.

A few observations on the "no net loss" goal are in order. The Service has had extensive experience in one aspect of this objective—mitigation of unavoidable wetland losses. We believe that the "no net loss" goal embodies the fundamental concepts of avoiding wetland destruction whenever possible, minimizing damage when wetland disturbance is necessary, and replacing functions and values that are lost. These concepts have been part of the Service's Mitigation Policy since 1981.

Obviously, to achieve a "no net loss" goal we must also consider functions and values of wetlands which extend beyond their fish and wildlife value. In many cases the hydrological functions of wetlands in terms of floodwater storage, groundwater recharge, and maintenance of soil moisture, may be the more valuable wetland functions to society.

Another concern regarding no net loss deals with whether the account is measured in wetland acreage or function. Clearly it is the functional aspect that imparts value to wetland habitats. On the other hand, our imperfect understanding of wetland functions often makes dealing in acreage an easier if less precise approach.

Finally, we must consider the applicability of this goal to all circumstances. There may be situations where flexibility is advisable because replacement opportunities are limited geographically, biologically, or technically.

In closing, Mr. Chairman, our national ledger of annual wetland losses and gains indicates that our annual losses or outlays are running at 300,000 to 450,000 acres, while our gains or income range from 20,000 to 25,000 acres. This means that we have a deficit of as much as 425,000 acres annually.

Perhaps the scale of this problem can be expressed by comparing wetland loss with the problem of tropical deforestation. Ironically, the furor over tropical deforestation comes at a time when the world has lost less than 20 percent of that resource internationally, while the U.S. has already lost 54 percent of its wetlands.

Clearly we all have a lot of work to do to achieve the President's goal of "no net loss." Solutions to wetland conservation issues depend to a large extent on public stewardship, given that an estimated 74 percent of the remaining wetlands in the continental U.S. are privately owned. Based on our experience in wetland trends, mitigation, and restoration, the Service is confident that attainment of "no net less" of wetlands is a desirable goal, and we are eager to pursue it.

Thank you.

[The statement of Dr. Morgenweck can be found at end of hearing.]

Mr. STUDDS. Thank you very much, sir.

The uncivilized buzzing you heard behind you means we have a vote on the floor. It is the conference report on the budget resolution. That shouldn't take us more than 5 minutes, which is 4 and a half more than the resolution is worth. We will stand adjourned for whatever amount of time it takes for at least two Members of the Committee to get over there and back again, about 6 and a half minutes in practice, maybe 7. We apologize for the interruption. We will be back as fast as we can.

[Recess.]

Mr. STUDDS. Regroup.

Did we lose some of the panel? If anybody finds wandering panel members, point them back.

Mr. Campbell, you are here. That's good. Deputy Under Secretary for International Affairs and Commodity Programs, Department of Agriculture. Mr. Campbell?

STATEMENT OF MR. CAMPBELL

Mr. CAMPBELL. Thank you, Mr. Chairman, for the opportunity to discuss measures to improve and enhance our Nation's wetland resources. In a letter inviting the Department of Agriculture to participate in this hearing, we were asked to identify the Department's programs that affect wetlands and to discuss the strengths and weaknesses of these programs. I commend my full testimony for your review. I think it is a good compilation of the activities the Department undertakes with respect to wetlands, as well as the strengths and weaknesses of such activities.

USDA's wetland programs can be divided into two groups: first, public land management, principally involving the National Forest System; and, two, assistance to nonfederal landowners and users, including private individuals and units of State and local government. I will focus on the second group of programs, especially as they relate to private landowners and users.

These programs have three important strengths: First, they are voluntary programs. Second, our programs are delivered at the local level, and have input from State and local units of government and advisory boards. Third, development and administration of these programs often involves cooperative efforts of the Department of Agriculture, Interior, Environment Protection Agency, and the Corps of Engineers.

We are in the process of developing a number of policy alternatives to meet the President's goal of no overall net loss of wetlands over time. It is our intention to develop these alternatives in the framework of an interagency wetlands task force which will be in place in the near future.

One of our oldest assistance programs is the Water Bank Program, which began in 1972. Under the Water Bank Program, wetland owners agree to protect and maintain wetland areas and establish permanent cover on adjacent lands for a 10-year period, in exchange for annual rental payments and cost-share assistance to establish cover.

Another important wetland conservation assistance effort is the Conservation Reserve Program—CRP—which is authorized by the Food Security Act of 1985. Recent expansion of the acreage eligibility criteria for the Conservation Reserve Program makes approximately 5 million acres of cropped wetlands eligible for the program.

In addition to our programs aimed at fostering wetland preservation, we also administer laws aimed at penalizing wetland drainage. The most important legislative initiative of this type for wetland preservation is the wetland conservation provision found in the 1985 act. Popularly known as "swampbuster," this provision denies certain USDA farm program benefits to farmers who

produce agricultural commodities on converted wetlands. Wetlands on which conversion activity began before the Food Security Act of 1985 was signed into law in December, 1985 are exempt from the provision.

However useful these conservation tools may be, we must recognize that so long as we provide income and price supports based on production, there will be a tremendous stimulus for farmers to produce. Generating huge surpluses not only costs taxpayers large sums of money, but it may have adverse environmental consequences as well, in levels of soil erosion and in groundwater quality and in destruction of our vitally important wetlands. If we are to have an environmentally sustainable agricultural production system over the long pull, we must find ways to diminish gradually the nexus between income supports, price supports, and production levels.

In the Department's emerging response to the "no net loss" of wetlands policy, we are taking a positive posture towards wetland protection in our programs. USDA has a set of programs which can help in wetlands conservation. The key, however, to their success is demonstrating the beneficial values of wetlands to landowners who ultimately have decisionmaking authority over their land, and assist them in realizing the potential benefits of wetland conservation.

Thank you, Mr. Chairman.

[The statement of Mr. Campbell can be found at end of hearing.]

Mr. STUDDS. Thank you very much, sir.

Next, Dr. William Hooke, Executive Director of the Office of the Chief Scientist at NOAA.

Dr. Hooke?

STATEMENT OF DR. HOOKE

Dr. HOOKE. Thank you very much, Mr. Chairman, Members of the Subcommittee.

The statement that we have introduced for the record shows that NOAA is a very broad science and resource management agency. We find that even in parts of our program where you might not think that coastal wetlands were an issue, our weather services, because they provide or call for protection from storm surge in coastal areas, or our interest in climate and global change, we find that there are significant points of contact with the coastal wetland issue.

But the activities that most closely connect to our interest in no wetland loss deal with our role as a steward or a keeper of the Nation's marine resources, particularly the Nation's living marine resources, and the written statement that you have provides a litany of the various programs that have been developed in NOAA over the years to deal with one or more aspects of the problem. I don't need to go into that because many Members of this Subcommittee have been important in creating these programs in NOAA and providing input and guidance and encouragement as we have gone along.

There are a couple of factors, however, that I think merit some attention here in addition to the material you will find in the writ-

ten statement. The first is that the coastal wetland system—and it is the coastal system that is of the greatest interest to NOAA—is a system that apparently is confined to the shoreline but in fact is very sensitive to events and decisions that are made throughout the continental United States, and so the development of a policy of no wetland loss is a goal that is going to require that we examine carefully what we are doing in our agricultural practice, that we examine our energy policy, that we keep close tabs of our demographics, our level of consumption, and our international trade. All of these, for one reason or another, have a coastal wetland impact, so that if we are trying to develop a meaningful policy that deals with no wetland loss, we have to take these factors into account.

The second point is that the programs that we have in NOAA by and large provide information for a range of decisionmakers that are to some extent internal within the agency, to some extent reside in other Federal agencies, but exist in a large number of walks of life, in a large number of areas of application, ranging from regulation and resource protection to research and to management of resources, and if we claim to be providing information for these decisionmakers, we have to make certain transitions in the way we have provided that information.

We have to make a transition from a fragmented provision of those data and that information to an integrated one that looks at the system as a whole. We have to make the transition from a retrospective look at trends in the coastal wetlands to an ability to determine in real time what is going on. We have to make a transition from "nowcasting"—a statement of what is the area of wetland, what is the condition of that wetland now—to an ability to forecast with credibility those trends in the future.

To do this requires that we make a transition from ignorance to understanding, and in that connection I ought to mention that from NOAA's point of view, from a habitat point of view that says that wetlands are the home for the resource we are trying to protect, that the emphasis from our point of view should be on no net loss of wetland function: that we examine the role of the wetlands in producing the marine resources, particularly the living marine resources, and that we try to deal with that function.

We have had a few looks at that with the Corps of Engineers and with other agencies represented at this table, and we find that to preserve wetland function is a quite different matter from simply planting some vegetation and watching the progress of that over a few months or a year or two. We are convinced now that such preservation and an ability to understand what we are really doing out there requires long-term monitoring, and we are dedicated to doing that.

We cannot do this by ourselves. We have to do this in cooperation with the other agencies. We are looking forward to participating in the interagency task force.

Thank you very much, Mr. Chairman.

[The statement of Dr. Hooke can be found at end of hearing.]

Mr. STUDDS. Thank you very much, Dr. Hooke.

Our final member of the panel, Mr. John Doyle—Is that all one title?—Principal Deputy Assistant Secretary?

Mr. DOYLE. That's it.

Mr. STUDDS. That is awesome. I hate to think who your assistants are. Tertiary Deputy Assistant Secretaries? Civil Works, Department of the Army. Welcome.

STATEMENT OF MR. DOYLE

Mr. DOYLE. Thank you, Mr. Chairman. It is a pleasure to again be before the Committee, particularly to testify on the issue of wetlands in the Nation and how we can do a better job as a Nation to protect those extremely important resources. The Committee of course has had a longstanding interest in wetlands issues and in efforts to preserve and protect those wetlands, and it is a pleasure to be here, to be working in the same direction to attempt to do the best job that we can with respect to wetlands protection.

With your permission, Mr. Chairman, I will just make a brief point or two and then answer any questions that you might have. I won't attempt to go through the major points that are made in the written statement. They will speak for themselves, but I would like first to indicate how pleased the Army and the Corps of Engineers, as an institution, are with respect to the leadership and the direction that President Bush has charted for us in terms of the need to protect our Nation's wetlands. We think it is absolutely the right direction, the right vision. There is no question we have many issues to address, many details to flesh out, but there is also no question that this is the direction the Nation needs to go in terms of our joint efforts.

Secondly, the matter of wetlands protection as much as anything, I believe, is a function of growing awareness in this country of how important wetlands are in an ecological and economic sense. It wasn't too long ago, as the Chairman and the Committee Members know, that it was the preconceived national policy to fill or drain wetlands for other uses. Programs that were developed, both in the Congress and elsewhere, in the 1950s and before, viewed wetlands as being a problem to be rid of rather than a resource to be protected. Over time, fortunately, we have come to appreciate how terribly important wetlands are to this Nation, and as such our view with respect to wetlands use also has changed.

Of course, we can't look at wetlands protection issues in isolation and don't suggest that we should. Other very important national values must be addressed in connection with protecting and using wetlands resources, and that is the approach that we believe needs to be emphasized as we go forward to further improve wetlands legislation and regulation and use in this country.

We are making progress. A number of comments have been made thus far about the enforcement memorandum of agreement which recently was entered into between the Army and the EPA. The jurisdictional MOA which was a 5- or 6-year effort, culminated in a jointly-signed MOA a few months ago. The Wetlands Delineation Manual again culminated a multiyear effort to have at least four Federal agencies who deal in wetlands matters agreeing on a single delineation methodology for purposes of identifying wetlands.

Funding in the Corps program has increased significantly over the past few years. Just 4 or 5 years ago our regulatory permit pro-

gram was funded at approximately a $50 million level. This year we have slightly more than $60 million devoted to our 404 wetlands program and hopefully, if Congress will agree with us and accept the President's proposal, we will add another $5 million to that effort for Fiscal Year 1990. In addition, we are currently requesting a $2.5 million supplemental to augment further the 404 regulatory and wetlands research and development activities of the Corps of Engineers.

In summary, Mr. Chairman, I think we are going in the same direction. I think it is a most important direction, and we look forward to working with you to do the best job together that we can to protect these resources.

[The statement of Mr. Doyle can be found at end of hearing.]

Mr. STUDDS. Thank you, Mr. Doyle.

Let me start with a question directed to Mr. Davis of the EPA, and others can speak up if they wish to. It really gets at the—I guess what, Mr. Doyle, you just referred to—the degree of enthusiasm with which you view the new administration's policy. All of you will have a chance to be more precise about that in a minute.

Mr. Davis, are you familiar with a memo prepared by OMB that provides guidance to you and other Federal agency witnesses concerning your testimony on wetlands issues?

Mr. DAVIS. Yes, Mr. Chairman, if you are referring to one that was issued about a month ago in connection with Public Works and Transportation——

Mr. STUDDS. On the same subject matter?

Mr. DAVIS. Yes.

Mr. STUDDS. Is it correct to assume that this is the guidance you will all be operating under today?

Mr. DAVIS. I think it is safe to assume, yes, sir.

Mr. STUDDS. That guidance states, does it not, that "Agency testimony and Q and A should not include explicit or implicit policy recommendations. Testimony should be confined to factual items."

Mr. DAVIS. That's what it says, yes, sir.

Mr. STUDDS. And here we are, all five of us.

Mr. DAVIS. But I don't think we will adhere to that to the letter.

Mr. STUDDS. Strike that from the record. This man needs a job.

[Laughter.]

Mr. STUDDS. I appreciate that. Well, in that case let me ask you a few factual questions.

Why has it taken almost 4 months for this administration to form an interagency task force on wetlands. Most bureaucrats can do that in their sleep, before breakfast. What is the problem?

Mr. DAVIS. The problem, as I understand it, Mr. Chairman, is that the Domestic Policy Council, which first had to organize itself and get all of its members on board, had an agenda that had to be laid out. Initially, in the environmental area they took on several other issues, notably global warming, acid rain, and the reauthorization of the Clean Air Act. The intent was to get to this and other environmental issues just as soon as they got those underway.

Mr. STUDDS. They must have exhausted themselves with global warming. That initiative was really breathtaking.

Mr. DAVIS. I think that is highly possible. We have been led to believe that invitation letters to start that process for the wetlands task force may be due out very shortly.

Mr. STUDDS. Very shortly? Well, then, let's get more precise. Can you tell us when the administration will be able to send somebody up to Capitol Hill who will be encouraged, rather than prohibited from making policy recommendations? After all, if it takes more than 4 months to form an interagency task force, how long is it going to take for the task force to develop policy, clear it with OMB, and get themselves up here? I know you can't give us a precise date, but maybe a fiscal year?

Mr. DAVIS. One would hope, Mr. Chairman, that it will be this fiscal year. I think there is enough general——

Mr. STUDDS. This fiscal year?

Mr. DAVIS [continuing]. Enough general enthusiasm within the administration to move ahead swiftly, once the framework is established. That seems to be the kind of sense that we are getting.

Mr. STUDDS. Well, if you have a general enthusiasm detector that works for the administration, it would be very useful if you could share that.

Mr. DOYLE. Mr. Chairman, perhaps I can give you the benefit of my enthusiasm indicator.

Mr. STUDDS. Please.

Mr. DOYLE. I believe that we will be seeing, within a matter of days, the formation of that task force, and I believe that within a week or so thereafter you will see the first meeting of that group. I also believe that shortly after the group is formed, we will begin to get the kind of detailed guidance that I think we all are looking for.

Mr. STUDDS. You take my breath away. Maybe we should adjourn and wait. I hope that it comes out that way. I don't think the public is going to be bowled over by the anticipation within a matter of days of the appointment of an interagency task force. I don't think I am going to see that in the headlines, but I hope you are right and I hope we get something up here.

We reviewed several of the President's statements about wetlands. He talks, as many of you have said, about the goal of no net loss. He talks about strengthening the Executive order, and he talks about enforcing existing laws, but nowhere does he state his intention to recommend changes in current law.

Now I want to ask you a factual question: Mr. Davis, given the current limitations of the 404 program and the extent to which our remaining wetlands are in private hands, do you believe we can achieve the goal of "no net loss" of wetlands without amending and expanding our current wetlands protection laws? No policy, just factual.

Mr. DAVIS. No, sir, I do not believe that we can meet the goal without some change in our existing laws. There are many things we can do to move in that direction that can be done outside of regulatory programs and perhaps even outside of Federal law, because there is a role for States and local governments and private citizens. However, there are some areas of regulatory coverage that, unless and until they are brought under some form of Federal law,

either regulatory or incentive or disincentive, I don't think we will really ever be able to completely come to grips with them.

Mr. STUDDS. Is anyone else close enough to retirement to contemplate——

Mr. CAMPBELL. Mr. Chairman, I am only 3 weeks on the job so it would be a rather quick term, but I would like to draw your attention to a very specific proposal with respect to wetland protection which is pending before the Congress in the form of the budget request that came up, as part of President Bush's budget request. It involves additional funding for the Water Bank Program which, as you know, protects about 170,000 acres of wetlands and about 350,000 acres of adjacent lands.

The specifics of the proposal involve switching from a 10-year rental contract for these wetlands to a permanent easement as the contracts expire. The proposal is still going around the interagency process, but the budget request has been put in and the Department hopes to bring forth legislative language for introduction fairly soon. We think that going to a permanent easement on these wetlands, in conjunction with the swampbuster provisions of the 1985 act, would enhance the wetland protection provisions of the Water Bank Program.

Mr. STUDDS. I appreciate that.

Let me throw one more factual question out, and then anybody can respond to any of them you want: I know that OMB won't let you say whether you support the policy recommendations of the Wetlands Policy Forum, so let me ask you, based on the facts again rather than on policy, can the United States achieve the goal of "no net loss" of wetlands if we do not carry out the major recommendations of the forum?

For example, the forum would have us expand the 404 program to include clearing and draining activities as well as filling. Factually speaking, wouldn't that change go a long way to help us control wetlands loss, especially on agricultural lands?

[No response.]

Mr. STUDDS. I see.

[Laughter.]

Mr. DOYLE. A simple answer, Mr. Chairman, is it depends. It depends on how it is done. It depends on what agencies are involved, what factual criteria you establish. In fact, making that change may not achieve the goal of "no net loss" because there is a tremendous loss of wetlands that takes place completely outside of activities relating to draining as a result of natural occurrences, so I don't think anybody here can give a definitive answer to that question.

Mr. STUDDS. Certainly no one is going to. I can tell that.

Does anyone else want to respond to anything that has been on the table so far? You actually want to?

Mr. DAVIS. Yes, Mr. Chairman. One point that I would like to make is, there seems to be perhaps too much reliance on the task force that is coming up for dealing with this question, because all of us represented at this table already administer programs that have been operating for years and they have been increasingly strengthened over the last few years toward achieving this goal.

At least for my agency, we basically did endorse the "no net loss" goal late in the prior administration's term, and we have been doing all the things that we have within our current capabilities, both statutory and resources, to move forward toward that goal, so we have not been sitting on our hands waiting for this task force to be formed. I think that is important to keep in mind.

Mr. STUDDS. That is very refreshing. So your enthusiasm is ready and standing by, and ready to be called upon as soon as there is a policy.

Mr. DOYLE. Mr. Chairman, I will make a prediction.

Mr. STUDDS. Yes.

Mr. DOYLE. I will make a prediction that nothing that the task force does or nothing that the Congress does will completely resolve all of the issues that have to be resolved with respect to wetlands protection.

Mr. STUDDS. You don't get any points for a prediction that safe. [Laughter.]

You have to have at least some odds around here, if you are going to get some credit for a prediction.

Mr. DOYLE. Well, at least we agree on that, sir.

Mr. STUDDS. You could fill in the problem, too, as you know.

Mr. DOYLE. But I think we also agree—I will make another prediction—that we can together make a lot of progress towards the goal of "no net loss," and it seems to me that is what we need to be focusing on, that is what we need to be trying to do.

Mr. STUDDS. I don't have any objection to that.

I have other questions, but I will go first to the Members of the Committee who are here.

The gentleman from Delaware?

Mr. CARPER. Thank you very much, and to each of our witnesses, we welcome you and we thank you for your efforts.

I live in Delaware. I represent the whole State. We are a State without mountains or hills. The closest thing we have to a mountain is called Mt. Cuba, and it is maybe 100 feet high. Just outside of our State there is Chadd's Peak, which is just across the border in Pennsylvania. It is maybe 200 feet high. The tallest point of our State I think is a bridge, actually. We have a lot of wetlands—it is not dismal at all, Mr. Bosco—we have a lot of wetlands and a lot of interest in wetlands as an issue.

For the most part, I hear from people—and I met with the Governor and our Secretary of Transportation recently and we talked about a wetlands application for a highway project where they had really wrestled to try to get permission to build across a small wetland—I hear from folks that want to develop in the southern part of our State. If anybody ever goes over to the beach, you drive through Sussex County. We have a lot of people, a lot of development in southern Delaware that is going on.

All I hear are complaints from folks who are having to go to the Corps of Engineers and try to get a permit, who wait interminable periods of time. I have a sense that it is really a situation that needs to be address. I am pleased that apparently we are going to have this interagency task force and try to get some cooperation and coordination.

Maybe one of you guys can just help me. Just explain to me how this 404 program works. I understand that the Corps actually issues the permits. I understand they issue the permits in conjunction with regulations laid out, I think by EPA, and I understand there is some consultation that goes on with other agencies, including NOAA and the Department of the Interior. Could somebody just lay out for me how the program currently works, and then just speak to some of the shortcomings in the program as it is now operating?

Mr. DOYLE. Let me take the first crack at that, Congressman Carper, and then——

Mr. CARPER. Somebody here on this first row, could you lower those microphones for me so I could see this guy's face? Thank you. Put them back up now.

[Laughter.]

Mr. STUDDS. The choreography will occur later.

Mr. DOYLE. Then others can fill in as they deem appropriate.

The program management responsibility is bifurcated between the Army Corps of Engineers and the Environmental Protection Agency. First of all we have to focus on the scope of the waters that are covered by section 404. These "waters of the United States," have been interpreted by regulation and judicial decisions to be an extremely broad reach.

However, the range of activities with respect to that broad reach of waters is narrow. Only the disposal of dredged or fill material in those waters comes under the coverage of the 404 program, and of course that was the point that Chairman Studds was making. There are a number of activities, estimated to be responsible for approximately 80 percent of wetland losses, which are not covered by the 404 program.

With that general overview of the scope of the program, section 404 prohibits the discharge of dredged or fill material into the waters of the United States without a permit. The Corps of Engineers issues the permits. The Corps evaluates permit applications in accordance with guidelines that are promulgated by the Environmental Protection Agency, called the 404(b)(1) guidelines.

When we get an application for a permit in an individual permit situation, first the Corps reviews that permit to make sure that it is complete. Then it notifies the other agencies and other individuals who the Corps knows have an interest in the permit or have a reasonable likelihood of having an interest. Comments are sought, coordination——

Mr. CARPER. What agencies might that include?

Mr. DOYLE. That would be the Environmental Protection Agency, the Fish and Wildlife Service, the National Marine Fisheries Service, State agencies, any local agencies, such as planning or resource management agencies, that the Corps believes may have an interest.

Mr. CARPER. And the application, is it submitted at the regional level?

Mr. DOYLE. At the district level. This program is basically managed at the Corps district level, in the 36 districts and two operating divisions of the Corps of Engineers.

Those comments are then evaluated. Discussions take place, if discussions are necessary, among agency representatives with respect to mitigation requirements, limitations, or restrictions that may be necessary to incorporate in the permit. Then the permit is either issued or denied, based on the decision of the District Engineer. Programmatically, the Corps gets——

Mr. CARPER. A question.

Mr. DOYLE. Yes, sir?

Mr. CARPER. Is there a time limit during which that evaluation and the exchange of ideas and information between the agencies takes place? Does a clock begin to run, after which time the permit must be issued, either a go or no go decision?

Mr. DOYLE. We have nonbinding time limits that we use as guidelines to try and get our decisions out in a timely manner. There is no time limit, however, that says if no decision is reached within X number of days, the permit is deemed denied or deemed approved.

Mr. CARPER. All right, and once the decision is made, is there an appeal process?

Mr. DOYLE. No, sir. Except, there is always the appeal process through the courts. However, there is a process that we have prior to the actual decision of the District Engineer, involving a request by the resource agency to elevate the decision above the District Engineer level to perhaps the Division Engineer, to the Chief of Engineers, or even to the Assistant Secretary's office. That process exists and sometimes is used when the agencies at the field level are not able to work out their disagreements, but it is used very infrequently.

Mr. CARPER. That is a helpful overview. Does anybody want to add to that in terms of how the process works?

Mr. DAVIS. The only thing I might add, sir, is that there is an additional step that can be taken. EPA has a residual veto authority. In other words, if the Corps makes a decision, after having exhausted all the procedures that Mr. Doyle has explained, that EPA feels strongly is inappropriate, and if we feel that we can document that there are unacceptable adverse impacts to certain values of the natural resource, we can invoke a process under section 404(c) that is, in effect, a veto of the Corps permit. To date, however, we have only done that eight times since 1972, with an average permit load of 10,000 or 12,000 a year, so it is very, very rarely used but it is an additional device that is in the process.

Mr. CARPER. Mr. Chairman, if I have time, I just want to ask what is wrong with the system that we have? I am not suggesting it is one we ought to keep, but what is wrong with it?

Mr. MORGENWECK. I am not sure that we are necessarily questioning the system as it exists right now. I think the question that has been raised so far is the extent of the coverage of this program. As Mr. Doyle said, it covers about 20 percent of those activities that affect wetlands, and the discussion so far seems to center around what other kinds of coverage, what other activities might be included under the 404 program. You know, I think that any regulatory program probably has its ups and downs, but in terms of improvements I think mostly what we are discussing here seems to be the breadth of coverage of the program itself.

Mr. CARPER. Anybody else like to comment? What do we need to fix here, aside from the breadth of the program? Dr. Hooke?

Dr. HOOKE. There are a number of people within the agency that have a much better feeling for this whole process than I do. I don't see it from a distance as being unique among Federal processes, either executive branch or legislative branch, in taking a little time.

One of the goals that has been expressed here is a goal of wetland preservation, and we have a lot of stewing to do on many of these cases just to define the science and the engineering behind any given activity. One solution is to be a little smarter, to develop more of an experience base and to develop something of a success rate.

One of the problems we have is, we have plenty of evidence of decisions that turned out to be unhappy ones and we don't have a lot of evidence of decisions where we said, "Yes, we knew what we were doing in that case. We did a good job and we are confident, going out and dealing with X and Y and Z, that we can respond to this quickly and be assured that there is going to be no negative impact."

Mr. CARPER. Mr. Campbell, you have been there 3 weeks, did you say? Do you have anything you want to add to this?

Mr. CAMPBELL. Fortunately we don't have much to do with the 404 program.

Mr. CARPER. Fine. Again, I will just reiterate and in closing say this is an issue that is enormously important in my State. There are a lot of people who are unhappy with the way the system works now. To the extent that you put together this interagency task force and you actually develop some recommendations to come back to us, we would certainly—the State of Delaware would want to be involved in that process, and we would invite that opportunity. I suspect we will have it, Mr. Chairman, and I thank you.

Mr. STUDDS. The gentleman from that district in California which includes approximately 10 Delawares.

Mr. Bosco. Thank you, Mr. Chairman. I was just thinking of the irony of discussing this issue here in Washington, which of course is a filled-in wetland, and I was interested in the statistic that supposedly 54 percent of all the wetlands that existed on this continent have been filled in. Who came up with that statistic?

Mr. MORGENWECK. The Fish and Wildlife Service is in the process of doing a wetlands inventory, and we have also done a trends survey to look at the rate of change or loss of wetlands over time. The estimate of 215 million acres at the time that European settlement occurred is that—it is an estimate. We do have pretty good information that indicates that we have about 99 million acres left, so we have lost—a simple calculation leads us to the 54 percent figure.

Mr. Bosco. Well, even that, though, is in conflict with testimony that has been given here.

First of all, let me say I completely support the goal of wetlands restoration, but I am very suspicious of these crash government programs that almost always seem to be based on statistics that none of us have ever heard before and, out of the panel here, none

of you agree on. I wonder, you know, is this a crisis or is it something that we should start to manage wisely?

I have an interesting situation out where I live in Santa Rosa. I have been trying for years to set aside a 16-mile-long wetland that is full of waterfowl and many species of fish and plants and flora and fauna. The U.S. Fish and Wildlife Service has informed me that they are not interested in setting aside this area as a refuge, and if it isn't set aside, it will probably be gone in about 5 years.

But near there, no more than a quarter of a mile away, are dry wetlands that don't have any water on them—they have these so-called vernal pools—that are owned by farmers, and an unholy corps of bureaucrats have been unleashed on these people. These aren't waters of the United States. They are isolated, dry wetlands that don't support any life whatsoever.

The Corps of Engineers first was involved, and I think made some very good, wise decisions about this, on mitigation and whatever. Now different groups have appealed to the EPA, saying that our local Colonel's decision wasn't a good one, and the EPA now has unleashed its people, and these farmers are very, very upset about this. They now can't plow their fields that they have plowed for years. They are very worried that there is no definition of wetlands.

I have visited the sites, and when I was there they weren't wet. They were as dry as a State Fair parking lot in the middle of the summer, but this 404 program has been held to apply to these isolated, dry wetlands. One of you just said that the 404 program only applies to waters of the United States, which any sensible person wouldn't consider that to be waters of the United States, and only then when it is being filled with dredging materials.

Why would these dry wetlands on private farmland be considered under the 404 program? It is clearly considered under that program.

Mr. DAVIS. Congressman Bosco, I am not familiar with the specific facts that you are addressing, but I can surmise that a decision was made, wherever it was made, that because of the presence of water on those vernal ponds for however long they were wet, that that kind of situation was within the reach of the definition of "waters of the United States" as that term is used in the Clean Water Act and as it has been construed by the courts.

Mr. BOSCO. But I was led to believe by the testimony that this 404 is actually a very narrow approach that only accounts for 20 percent of the wetlands. If it can account for wetlands that are dry 11 months out of the year, that are not connected to any waterways whatsoever—I am just talking about very small puddles——

Mr. DOYLE. The point I was trying to make——

Mr. BOSCO [continuing]. How could that be a waterway of the United States? And if it is, what broader of a definition do you need?

Mr. DOYLE. Well, that was the point that I tried to make, obviously not very successfully. The courts have looked at the Clean Water Act's definition in section 404 of "waters of the United States" and have construed that term enormously broad in terms of the actual area.

The narrowing takes place with respect to the activities that are occurring in the waters of the United States. That is a very narrow reach. Only the discharge of dredged or fill materials is covered by section 404. So we have an enormously broad reach with respect to the definition of "waters of the United States," and a very narrow reach with respect to the kinds of activities affecting those waters.

Mr. Bosco. Would a farmer plowing a field be a discharge of dredged or fill materials?

Mr. DOYLE. Generally no, but it depends on how he does it, and regardless of how he does it, he may be covered by the exemption in section 404 that takes out of program coverage normal agricultural activities.

Mr. Bosco. Well, I don't mean to be contentious, but according to this testimony, 74 percent of these wetlands are privately owned. I think that we are running into a buzz saw as we attempt to apply these laws. My own observation is that the definitions have to be clearer and the jurisdictional authority much sharper in terms of making these decisions, because out in the real world this has become a nightmare of bureaucracy.

Mr. DOYLE. I think I will try and speak for all five of us here, and then anyone who disagrees with me, jump in. I think we would all agree with that statement, that wherever we jointly decide that the jurisdictional reach ought to be, it ought to be clear-cut, if we can fashion the words and the science to lead us there.

The problem that you are describing and illustrating in just one example is one of the difficulties that we all face in this program. We are not looking just at wetlands in isolation. We have to look at wetlands—admittedly enormously valuable—in conjunction with other very important national values, like our constitutionally protected right to own and use property, like the need in various levels of our government to protect the public health and safety, like the need to maintain a sound economy, like the need to preserve our national defense. The wetlands issues aren't being looked at in isolation. We must look at them in conjunction with those other values, and that is a difficult thing to do even with perfect science, which we don't have.

So, Congressman, one thing I predict we would all agree to is, we have to improve the science with respect to these issues. We have to improve the methodologies that we use, in terms of delineating wetlands and evaluating wetland functions.

Mr. Bosco. Well, I am finished, Mr. Chairman, but I might say that I think you are absolutely right, but in the meantime there is havoc being wreaked on innocent people out there. I think that has become disturbing, and unfortunately it may divert us from the goal of protecting these wetlands.

Thank you.

Mr. STUDDS. The gentleman, between now and his next turn, can contemplate the difference between an "unholy corps of bureaucrats"—I believe that was the gentleman's term—on the one hand, and an interagency task force on the other.

[Laughter.]

The gentleman from New Jersey?

Mr. PALLONE. Thank you, Mr. Chairman.

My experience in my part of New Jersey is that the existing wetlands protection legislation really is not as effective as it should be. I constantly hear complaints about this problem with enforcement where too often a developer goes in, destroys the wetlands, and then seeks to get a permit after the fact when one of our local citizen action groups has discovered that in fact the wetlands have been filled in improperly. Then we end up with artificial wetlands replacing the natural wetlands, and the artificial wetlands don't work.

I say that, and I could give you so many examples of it, because it happens all the time in my district. There is a great deal of concern about it.

I see that both the EPA representative, Mr. Davis, and also the Army Corps, Mr. Doyle, mentioned efforts to beef up enforcement, and that is what I just wanted either of you to comment on briefly. There is a real enforcement problem, and it is to the point where the average citizen who is very concerned about wetlands protection in my district really feels that there is very little enforcement. I don't know if that is a money problem, a legislative problem, whatever, but if you could just comment on that briefly.

Mr. DAVIS. I will take the first shot at that.

Historically, enforcement was not one of our top priorities, at least not EPA's, and I hesitate to speak for Army, but for the last several years we have chosen to elevate that priority rather substantially, and that was in part aided by the fact that the Congress gave us some additional authorities in the 1987 Water Quality Act to levy administrative civil penalties for the first time, thus giving us an enforcement tool that could be used more frequently and without all the red tape and manpower demands that go into referrals through the judicial system.

As a result of that, we have increased our enforcement activities rather substantially. We are bumping up against resource limits because we have to do other things with those people, as well. We still have to review permits and work with States and work with local governments and do planning and all the other things we do, but at least we have cut out a larger slice of the pie for enforcement, and in fact continue to expand that even today.

Another problem that we faced was that we did not have as clear and as effective procedures for dealing between Army and EPA on that process, and we remedied that we feel in January with a new Memorandum of Agreement. It has only been a few months since then so we can't be absolutely sure how much that helped, but I think it has already clarified the responsibilities in a way that allows us to use what resources we have more effectively.

And, as a final point I would like to make, we have discovered in a couple of our regional offices that if we publicize our enforcement activities, if we take the additional step of seeing that the press learns about enforcement, that that has a tremendous deterrent value. Many people in this country have assumed for years and years that to fill in a wetland wasn't a real crime, that somehow that was okay. It was just something you got away with and yukked it up with the boys afterward over a beer, and you tricked the Feds or the State or whoever.

I think we are beginning to change that perception by showing that people get real fines and, more recently, real jail terms. We now have some jail time for the first time through the criminal program, and those ripples spread rather rapidly through the world out there and people start to behave differently. We feel that is already taking place.

Mr. PALLONE. Well, I am glad to hear that because I think that that certainly is a way of showing that there are some teeth in the law.

One of the things you mentioned, Mr. Davis, was expanding your advance identification program. I have had some criticism of that because—well, basically the way I understand, with this advance identification program it is a process whereby you identify and rate wetlands areas so that some are rated as suitable for development or less suitable than others.

One of the criticisms of that that I have heard is that once areas are identified as suitable for development if certain mitigation activities take place, that there is a rush to develop in there. In other words, developers rush in and seek to develop the property, and it has just the opposite purpose of what was intended.

In other words, theoretically these are all wetlands areas, but if the advance identification program shows that they can be developed if certain thing happen, in effect all the developers want to go in there and start putting up condominiums or whatever right away. I am troubled by that. You say you are moving ahead with that, but that may be counterproductive. I just wanted you to comment on that.

Mr. DAVIS. I would like to comment in a couple of ways on that. We do not have a lot of long-term experience with advance identification. It is something we only began to do a few years ago, and we have really only completed a relatively few actions, even though we have quite a number underway, so it is a little difficult to have a good fix on just exactly what does happen, both the circumstance you describe as well as the areas that are "protected" under this process, to find out how thoroughly they are protected.

We do believe, however, that on balance the enhanced awareness of the location, value, and regulatory mechanisms for the wetlands involved in one of these projects outweigh the risk that those areas deemed "suitable" will be filled. It outweighs it substantially, and in fact in most of the projects that we have carried out thus far, the criticism that we get for the most part is that almost everything ends up being unsuitable and nearly nothing ends up being suitable, so that it seems like what we are really doing is just redlining the area and not allowing any of it to be filled.

So I don't think I have seen much evidence that there is a lot of area being designated as okay for filling or that people are rushing in to do that. I would appreciate knowing, though, if you have some specifics on that, because that is exactly the kind of thing we are concerned about.

Mr. PALLONE. OK. Let me just ask a third question, if I could. I assume from what the Chairman said that we are in the process of possibly developing legislation in this regard, and one of the other concerns—and I believe it is something that was incorporated in re-

cently-passed State legislation in New Jersey for freshwater wetlands—was the concept of the buffer zone or transition zone.

One of the things that has happened in some of the cases where a developer will come in, is that the area that is immediately adjacent to what has been mapped as wetlands ends up being totally developed, and that has an effect on the wetlands area. I have been in before planning boards or had representatives before planning boards where the argument was being made that if these areas immediately adjacent to wetlands are completely developed, that that has a negative impact on waterfowl and flora and fauna related to the wetlands.

I think that there is nothing like a buffer or transition zone under present law, but I am hoping that in the process of putting together legislation, that we would take that into account because it almost defeats your purpose if the area immediately adjacent is not in any way protected or regulated. Maybe you could comment on that, as well.

Mr. DAVIS. You are absolutely correct, Congressman. The degree to which we can protect an area really involves the ability to protect it from all sorts of threats, and I think those of us particularly involved with the 404 program sometimes suffer from the conceit that if we protect it under 404, throw up a chain link fence around it, for example, keep the bulldozer out, that we have protected it for all times.

I think we now know that because of problems of nonpoint source runoff, acid rain, discharges that result from point sources that may not be adequately regulated, irrigation return flows—as was the problem with the Kesterson National Wildlife Refuge in California—and many other kinds of problems can in fact destroy a wetland just as surely as filling it in, so the concept of buffer zones is a very important one. You are correct, we do not have the authority to deal with that explicitly now under the Clean Water Act.

We do try to foster that notion, though, through comprehensive planning. Whenever we enter a special area management plan or a coastal management plan of some kind, one then has the capability, working through State and local governments that have authorities that we don't, to bring those other considerations to bear. The upland areas around a wetland can be incredibly valuable, particularly waterfowl nesting in the Upper Great Plains. Data released by the Fish and Wildlife Service in the last year suggested that we would have no further gains in waterfowl production simply by preserving more wetlands unless we also preserved uplands contiguous to them, because in many cases the ducks nest on the upland, feed in the wetland, so those are very real problems.

Mr. PALLONE. Thank you. I just wanted to say, Mr. Chairman that I really feel that this National Wetlands Policy Forum, that their proposals fall short of adequate wetlands protection. I am not happy with the "no net loss" concept. I don't think it goes far enough. I think we should have a net gain policy, and I am sure that is going to be part of our discussion but I just wanted to mention it.

Thank you.

Mr. STUDDS. God bless us each and every one.

The gentlelady from Washington.

Mrs. UNSOELD. Thank you, Mr. Chairman.

We are losing wetlands. We have lost a lot. We are probably going to lose more, and so there is sort of an underlying objective to try to add to our wetlands. We have mostly been talking about those most productive ecosystems, that type of wetland, but there is another function, namely that of improving water quality by filtering out pollutants and sediments, and they also recharge aquifers.

I want to sort of home in on that type of function, because all rain water coming down ends up going someplace. It either gets channeled into a pipe and gets discharged, causing pollution in larger waters, or it becomes a nonpoint pollution source, and some States are moving towards, some communities are moving towards recognizing the damage that this storm water runoff can cause and requiring that some sort of protective measure be taken.

Do any of you have any experience with communities that are acquiring, building wetlands, a drainage system, in order to provide a filtering basis, rather than to have to build, say, a secondary treatment plant or something for storm water drainoff?

Mr. DOYLE. Well, I know of one in Congressman Bosco's district. I believe the city of Arcadia—help me with this, Congressman, if you will—is using a wetland to perform a substitute function for a tertiary treatment plant. I believe there is a primary plant there that then discharges into a wetland, which goes through a series of stages, ultimately into the Pacific Ocean with tertiary level water as the output.

Mr. Bosco. If the gentlelady will yield, yes, that is true and very successfully so. We have this other city I was telling you about, Santa Rosa, which is a much larger city that is now going to do the same thing under the concept of creating wetlands.

Mrs. UNSOELD. I will have to get more information from you.

How many States have taken advantage of the Federal law to assume some additional responsibilities or take the lead here?

Mr. DAVIS. I will take that. Only one State, the State of Michigan, has actually sought and received delegation of section 404 permitting responsibilities under the Clean Water Act. New Jersey has made application. We have been, in fact, working with New Jersey over the last year on that. The application was not complete. All parties recognize that, but we are working together. We are hoping that application will be brought up to completion within the coming year and they will be the second State.

There are perhaps four or five other States who are active in this area. The list tends to change over time as their own legislatures change their interests, and Governors move in and out of the State House and so forth, but at the moment there is not a stampede to get the Federal program. We don't expect that there will be.

We do hope that over the coming years, because of the increased awareness from the Forum report, the "no net loss" goal as it achieves more national prominence, and the result of EPA having somewhat lessened the stringency of our delegation regulations about a year ago, that we will get quite a few more States on board. We are working actively with States to try to help them. Virtually any State that seeks our assistance, gets it, so we have been doing what we can to push that.

There are some statutory barriers, though, that make it less than absolutely attractive for States, particularly the fact that the States cannot take over the navigable waters, the actual navigable waters, so they are basically restricted to the nontidal waters and the rivers above the heads of navigation. For many States, particularly coastal States, that takes away a very large part of the attractiveness of the program, and that is a Clean Water Act limitation.

Mrs. UNSOELD. Do you think that the short-term cost is probably a factor also for them?

Mr. DAVIS. Yes, ma'am. Indeed the cost is a problem. There is no earmarked money, in the Clean Water Act or elsewhere, for the States to take over the program. They may use the general grant funds that they receive through section 106 or some of the set-asides under Title 2 of the Clean Water Act, but the simple reality is that those monies are already oversubscribed by other State water pollution control programs, many of which were well-established many years before wetlands became an issue, and at the State level and in the State budget process the wetlands programs simply have not been effective competitors, so they are not getting their "fair share" of those monies.

Mrs. UNSOELD. Mr. Davis, you have said that your agency is drafting a handbook for States to aid in the application of 401 certification of wetlands. When there is a draft that is available, I would very much appreciate getting a copy of it, if I could.

Mr. DAVIS. Certainly.

Mrs. UNSOELD. And the very last question: Apparently the Department of Interior Wetlands Report that has been some time not getting completed—September 1987 was down as a time for completion?

Mr. MORGENWECK. Yes. Volume 1 of that report was released in late 1988, and it was about a year after the deadline, that is correct. It has now been published and is released.

Mrs. UNSOELD. Well, maybe I can get a copy of that, too. You said Volume 1. Does that mean there are sub——

Mr. MORGENWECK. Yes. The second volume will cover other wetland areas of the U.S. The first volume merely dealt with the Prairie Potholes and the Lower Mississippi Alluvial Plain, and the second volume will cover other wetland areas.

Mrs. UNSOELD. Is there a time schedule for the rest of the country, then?

Mr. MORGENWECK. I don't know the answer of when that one is due. I do know that we have a draft being prepared right now, in review at the staff level still, so it will be some time yet, I think.

Mrs. UNSOELD. Thank you, Mr. Chairman.

Mr. STUDDS. Thank you. Two quick final questions, if we can, while we still have this panel:

Mr. Morgenweck, the Wetlands Policy Forum recommended, as you know, that we establish an agricultural wetlands reserve program under which we would compensate farmers who agree to protect their wetlands. Do you believe, as a strictly factual matter, that such a policy might contribute significantly to the preservation of wetlands—might?

Mr. MORGENWECK. It might.

Mr. STUDDS. It might, but the word "policy" should not have been in that question, should it?

Mr. MORGENWECK. I think that a set-aside of that sort certainly has some benefits in this respect. There are agricultural wetlands, obviously, that are in danger—or wetlands, I should say, that are in areas of high agricultural activity—and are in danger of being converted to agricultural production. Those areas I think would be high candidates for such a program, especially if they had high values for fish and wildlife in our case, or other values or functions of wetlands, so I think you balance those two off.

Mr. STUDDS. Mr. Campbell, I wrote to Secretary Yeutter last month about the possibility that your Department might reverse its current policy of requiring the placement of conservation easements on wetlands that enter the Farmers Home Administration inventory. As you know, if that policy were to be reversed, as I understand it, we would lose the opportunity to permanently protect more than 300,000 acres of wetlands at virtually no cost to the Federal Government. Can you tell us at this point the likelihood of that being reversed, that the mandatory conservation easements would or would not be continued to be required?

Mr. CAMPBELL. Well, I would like to first of all, if I might, say that there are two categories of land involved in this issue. The first category is the land that is in FmHA inventory and is being or going to be sold to third parties. That ground is being encumbered with easements in accordance with various Executive orders.

However, I think the bulk of the land in question is involved in what is known as a leaseback/buyback situation driven by the Farm Credit Act of 1987. Although the administration does have a policy of encumbering FmHA property, the Farm Credit Act of 1987 takes precedent over those Executive orders with respect to what is known as "borrower rights."

Under the borrower rights specified in the act, borrowers must be returned their land in the same condition as the land is negotiated under the leaseback/buyback. Those producers have the opportunity to encumber their deeds with easements if they so desire, and if they do so, the economic value of those easements is discounted from the obligation of the producer.

I might say that there is a cost associated with all easements, whether they be easements purchased by the private sector or the public sector. In this case, the revenue to the Farmers Home Administration would be decreased by the amount or the value of the easement or the land encumbered.

Mr. STUDDS. I think that is some kind of a wetland akin to a swamp, that question. I listened as carefully as I could. I don't think I want to take the time of the Subcommittee now to try fully to understand that, but it sounds to me that it is probably worth the effort to try to understand on our part. I am not accusing you of being opaque. I know it is complex.

Mr. CAMPBELL. It took me a while to get to the point where I could try to——

Mr. STUDDS. I think I am worried about your answer but I am not sure.

[Laughter.]

Mr. CAMPBELL. Well, I might say, one more point, if I may, is that we are negotiating with the Fish and Wildlife Service and other agencies involved in the leaseback/buyback process, to see if there isn't some way that we can enhance the opportunity to put easements on that property and not be in conflict with the legislation that has been passed.

Mr. STUDDS. Yes. Mr. Morgenweck, did you want to quickly respond to that? I can't tell from your expression whether you do.

Mr. MORGENWECK. We are in fact discussing with FmHA that situation and the ways of dealing with the leaseback/buyback situation. Our bottom line principle is to try to protect the wetland.

Mr. STUDDS. OK. I want to thank all of you very much for your patience and for your persistence. I hope the next time we see you, you will come armed with a policy as well as with enthusiasm, and we stand ready to share both with you.

Mr. STUDDS. We will go to the second panel. If we can drain the room as quickly and quietly as possible, we would appreciate it.

Panel number two, thank you especially for your patience. We are going to ask you to play by the same rules, if you will: that is, no more than 5 minutes for an individual oral presentation. Your written statements will appear in full, and we will go in the order in which you appear here, starting with Mr. Lonnie Williamson of the Wildlife Management Institute.

Mr. Williamson?

Bad luck, Mr. Williamson. Just a moment.

Good luck, Mr. Williamson. That is the most welcome sound of all. That is adjournment.

Mr. WILLIAMSON. We are safe for a while?

Mr. STUDDS. We are. The country can breathe deeply for another night.

Mr. Williamson, please proceed.

STATEMENTS OF A PANEL, CONSISTING OF MR. LONNIE L. WILLIAMSON, VICE PRESIDENT, WILDLIFE MANAGEMENT INSTITUTE; MR. MAX PETERSON, EXECUTIVE VICE PRESIDENT, INTERNATIONAL ASSOCIATION OF FISH AND WILDLIFE AGENCIES; MS. JANICE GOLDMAN-CARTER, COUNSEL, FISHERIES AND WILDLIFE DIVISION, NATIONAL WILDLIFE FEDERATION; MR. MARK MASLYN, ASSISTANT DIRECTOR, NATIONAL AFFAIRS DIVISION, AMERICAN FARM BUREAU FEDERATION; AND MR. RALPH E. HEIMLICH, AGRICULTURAL ECONOMIST, ECONOMIC RESEARCH SERVICE, U.S. DEPARTMENT OF AGRICULTURE

Mr. WILLIAMSON. Thank you very much.

We were asked to talk about the agricultural impacts on wetlands in the U.S. today, Mr. Chairman, and estimates that the Fish and Wildlife Service has given us say that agricultural drainage and conversion has consumed something on the order of 11 million acres of wetlands since the mid-fifties. We have only about 70 million acres left in private ownership today.

Provisions in the farm program that were enacted in 1985 contain some very important language for wetlands preservation. The swampbuster provision, the Conservation Reserve, and the conser-

vation easement sections are all aimed at protecting wetlands on agricultural land.

Briefly, the swampbuster simply denies Federal farm program benefits to producers that drain wetlands and convert them to agricultural commodity production. The CRP makes payments to farmers who retire highly erodible land for 10-year periods. Conservation easements allow the Farmers Home Administration to provide debt relief to farmers for giving easements to protect wetlands on their property.

With the swampbuster, among the chief concerns with this program is that it only denies benefits to those who drain and subsequently plant a specific commodity crop. This creates a loophole. It becomes even more dangerous in that a committee of local farmers are responsible for making determinations in the swampbuster violations program. We think by tying farm programs to wetlands preservation, the swampbuster has potential where some agricultural policies have failed.

Conservation Reserve is a program which was expanded recently to compensate farmers for restoring and enhancing wetlands. The new changes, which came in February of 1989, allow wetlands cropped during dry years to be enrolled in the 10-year program. According to USDA, we have about 200,000 to 300,000 acres of restorable wetlands enrolled in the Conservation Reserve now.

We believe, however, that we must have additional incentives and changes in CRP if it is to have lasting effect. Currently, wetland acreages in CRP represent less than 1 percent of the 30 million acres that have been enrolled into the program thus far. We believe that some kind of bonus payments or other additional incentives are needed to encourage landowners to voluntarily enroll and restore wetlands during the remaining three CRP sign-ups that are ahead of us.

The Farmers Home Administration was given a rather unique opportunity to protect wetlands in the 1985 Farm Act. Section 1318 authorizes that agency to assist financially troubled farmers by allowing them to cancel a portion of their delinquent debt in exchange for 50-year or longer easements.

Response to the Farmers Home Administration debt-for-easement program has been a bit disappointing to us. For nearly 3 years FmHA has stalled, in our opinion, the implementation of this program. Then when the changes were made by Congress in the 1987 Agricultural Credit Act which allow delinquent borrowers to write off debt owed to FmHA rather than exchange it for conservation easements, FmHA sort of gave up trying to get any easements as the original program calls for. The agency has forgiven more than $1 billion in debt owed by approximately 5,200 borrowers, an average in excess of $176,000 a person. In sharp contrast, FmHA has used conservation easements to help farmers resolve their problems in fewer than 350 cases.

We don't think the agency is fulfilling its responsibility to use easements for protecting wetlands on inventory land. These lands are the ones that the FmHA has taken from farmers for delinquent debts.

The Fish and Wildlife Service reports that it has made more than 1,200 easement recommendations covering some 100,000 to

150,000 acres of the inventory lands, and Farmers Home Administration has finalized less than 100 of these recommendations.

We think that another underutilized program for restoring and creating wetlands is the Small Watershed Program, Pub. L. 566, which has been around since the 1950s. It is administered by the Soil Conservation Service.

The Small Watershed Program is undergoing transition today. Traditionally, it has been a flood control effort, and has been notorious for directly or indirectly increasing agricultural drainage and conversion of wetlands. But today large, expensive, and sometimes destructive projects are beginning to give way, as they should, to smaller projects that use stronger local cooperation and inputs, including cost-sharing. We think there are some unique opportunities to use Pub. L. 566 funds to acquire easements in flood plains, wetlands, and riparian areas.

However, funding for Pub. L. 566 for beneficial wetland projects that serve a variety of public needs has been negligible so far. We think SCS should place a greater emphasis on wetland and water quality enhancements as called for by presidential initiatives, if this Small Watershed Program is going to broaden beyond its present base of support.

Although these aforementioned incentive approaches such as CRP easements and other procedures have been and shall continue to be used to maintain important wetlands, the problem still exists that the Nation cannot afford to lose any more. Existing regulatory procedures cannot adequately maintain these unique units of the landscape. We just heard from earlier witnesses that wetlands can be drained under the 404 procedure, even though they cannot be filled without a permit. Under swampbuster a wetland can be drained without loss of agricultural subsidies if a specified crop is not planted in the drained area.

We think that a better approach is required, and the Institute recommends a three-point system based upon the public trust doctrine of law. This system already has been used successfully in several areas.

Number one, there should be established a legal presumption that wetlands shall be maintained to perpetuate public values. Number two, there should be provided an opportunity to rebut that presumption; and, number three, there should be an appeal process.

This three-point system now is being used successfully in Massachusetts, a water management district in Florida, and for fish habitats in Canada. I think it warrants authorization and use at the Federal levels in the U.S, Canada, and Mexico, to overcome the shortcomings in existing programs.

Thank you, Mr. Chairman.

[The statement of Mr. Williamson can be found at end of hearing.]

Mr. STUDDS. Thank you, sir.

Next, Mr. Max Peterson of the International Association of Fish and Wildlife Agencies.

Mr. Peterson?

STATEMENT OF MR. PETERSON

Mr. PETERSON. Thank you, Mr. Chairman. In view of the time, I will try and highlight some points that maybe haven't been brought up before. You have my full statement for the record.

Let me start out by saying that we recognize that the process of loss of wetland has been going on for a long time in this country. It won't be reversed overnight. We don't see any "silver bullet" that would do that. What we are suggesting is that there are a whole lot of opportunities to make a difference.

Probably the first opportunity is one of public education and understanding of the value of wetlands and the functions they perform. We tend to protect the things that we value. If we don't value something or we see it as a liability, we are less likely to protect it.

A problem with protection of wetlands that is likely to be around a while is that most wetlands are privately owned, but the private owner does not see the benefits of the wetlands accruing to the owner. They may see benefits but they see them accruing to other people. Therefore, somehow we have to relate the cost of protecting wetlands to those who benefit from the protection, and not see wetland protection as simply a liability carried by a few people.

So we see the need for programs of public education, of technical assistance, and of incentives and regulation. All of those approaches will be necessary in order to make significant progress.

There are some rays of light. Some States have done some very innovative things. Minnesota, for example, has a "reinvest in Minnesota" program where there is a 1 to 1 matching program to protect critical habitat. Missouri, through its Department of Conservation, has drafted a Statewide wetlands management plan which identified critical and important wetlands for a variety of purposes, and has a very active program where either easements or acquisition are planned.

Let me talk about a few other things that go beyond technical assistance and education. A very high priority needs to be assigned, as Mr. Williamson said, to keeping the provisions in the 1985 Farm Bill and expanding them, so that we are sure that the Conservation Reserve provisions of the 1985 Farm Bill are retained. We seek to retain the benefits of the Conservation Reserve Program.

There are, for example, uses of wetlands that are perfectly compatible with their continued functioning. Hardwoods can be grown in wetland areas. They can be used for groundwater recharge. They can be used for secondary and tertiary treatment without damaging the wetland functions.

The Water Bank Program that has been mentioned here, which is separate from the Farm Bill, is a specific program to protect wetlands. Some innovative things that are being done in North Dakota, in the Pothole regions of the country that are extremely important to waterfowl, include what we include "piggybacking" on Conservation Reserve programs. That is to provide specific easements around these wetlands.

As mentioned here previously, if just the wetland is protected and no area around it, the wetland itself may deteriorate to the point where it is not much use. The function may be lost, with the

wetland still there. It may have too much sediment in it or pesticides or herbicides or other things, and if the wetlands are to serve waterfowl, for example, there may need to be a nesting area around it. Again the function may be lost with the wetland still being there. So we need to concentrate, as we look at protecting wetlands, on the function that wetlands provide and not just wetlands.

The 404 process, as has been mentioned before, is deficient in that it does not cover drainage or other loss of wetland functions. There are some minor things that could be done but have major payoffs. Some acquisition of land for refuges, both Federal and State wildlife refuges, is now being stopped because of the lack of assured revenue sharing. Refuge revenue sharing provides that funding will be provided to the States and counties to offset the loss of tax revenue. For several years in a row now full funding has not been forthcoming.

The Water Resources Development Act provides a mandate to the Corps of Engineers and to the Bureau of Reclamation to have a positive program of wetlands restoration and protection. I wish there had been an opportunity when the Corps of Engineers witness was here to talk about the positive things that they might be doing, such as to meet the mitigation requirements, as well as regulatory functions. There are substantial opportunities under the 1986 Wetlands Act.

The North American Waterfowl Management Plan, the agreement between Canada and the United States, reflected in bills before this Committee and the Senate provides a substantial opportunity to have a positive influence on the protection of wetlands for many important values.

Mr. Williamson has also discussed the FmHA easement provisions. Mr. Chairman, I would suggest that there are several ways to interpret that law. If you look at the fact that a farmer may get a $100,000 benefit through a write-down, it seems to me the public ought to get something in return for that. I am not sure that the two provisions of law need to be interpreted as contradictory. We would recommend that in return for the benefits of the write-down opportunity those public benefits such as easements for important wetlands be realized to the extent that they can.

We have also suggested that there may be some new things like a wetlands voucher system, whereby farmers would exchange wetland easements or fee title in exchange for commodity crops in storage or maybe some of these FmHA inventory lands that do not contain wetlands, so they would get farmland in return for protecting wetland.

Mr. Chairman, that concludes my highlighting of my statement.

[The statement of Mr. Peterson can be found at end of hearing]

Mr. STUDDS. Thank you, sir.

Next, speaking for the National Wildlife Federation, Ms. Janice Goldman-Carter. Welcome.

STATEMENT OF MS. GOLDMAN-CARTER

Ms. GOLDMAN-CARTER. Thank you, Mr. Chairman and Members of the Subcommittee. I want to mention that I am also presenting

this testimony on behalf of the Environmental Defense Fund and the Izaak Walton League of America. We appreciate the opportunity to present oral and written testimony on the effectiveness of existing programs for protecting wetlands from agricultural conversion and measures to halt such conversion, and ask that our testimony be included in the record of the hearing.

The National Wetlands Policy Forum report and President Bush's endorsement of the report demonstrate a strong national consensus that wetlands are indeed valuable natural resources, vital to our present and future standard of living; that we have already lost too many of them; and that we must find ways to achieve the no overall net loss of our wetlands in the short term and to increase the quality and quantity of the wetland base in the long term.

The purpose of this hearing is to identify the specific measures which must be implemented to achieve these goals, particularly those measures which require new Federal legislation. With 87 percent of our Nation's wetland losses, at least during the period of the fifties through the seventies, attributable to agricultural conversion, we cannot escape the fact that stopping wetlands losses nationwide will require stopping the conversion of wetlands to agriculture, and we must not delude ourselves into believing that the existing conservation programs on the books will do the job.

First, as has been mentioned, the permit program under section 404 regulates only the discharge of dredged or fill material into wetlands. The Corps of Engineers has generally refused to regulate discharges that accompany drainage, ditching, excavation, and clearing of wetland vegetation, referring to such discharges of dredged or fill material as de minimis, yet these are exactly the forms of wetlands activities that are causing the loss of wetlands due to agriculture.

To remedy these problems with the 404 program, the program should be amended to first expressly state a national wetlands policy and goal of no overall net loss of wetlands, and a long-term goal of increasing the wetlands base. To ensure that agricultural wetlands conversions are treated the same as other wetlands conversions, section 404 should be amended to clarify that drainage, dredging, excavation, inundation, and clearing of wetlands are subject to permit requirements. While normal ongoing agricultural, silvacultural, and ranching activities would continue to be exempt from regulation, the conversion of wetlands to new land uses would require a 404 permit.

Second, the swampbuster provisions of the 1985 Food Security Act only discourage, they do not prohibit agricultural wetland conversions. Indeed, swampbuster is only effective with those agricultural producers who rely heavily on commodity program subsidies. Even in those situations in which swampbuster could strongly deter wetland conversion to crop production, it hasn't done so due to poor implementation, particularly on the part of the Agricultural Stabilization and Conservation Service county and State committees.

Swampbuster, as currently written and implemented, will not stop the conversion of wetlands to agriculture. Our Prairie Wetlands Resource Center, based in Bismarck, North Dakota, has

spent the last 2 to 3 years researching in depth the performance of ASCS in the Prairie Pothole States, and a large part of our rather bulky testimony is intended to prove that there is in fact a problem with swampbuster implementation.

Based on that experience, we recommend that swampbuster be strengthened by first giving the Fish and Wildlife Service a primary role in swampbuster compliance determinations; second, by making producers ineligible for benefits upon wetland conversion, regardless of whether a commodity crop has been planted on the converted wetland; and, third, by encouraging and facilitating the participation of environmental organizations and concerned citizens in the swampbuster program.

The third area of Federal conservation programs is the area of conservation easements and fee title acquisition. These programs, while positive and valuable, are not adequate to protect even the 5 to 10 million most vulnerable wetland acres, particularly as they are currently implemented and funded. An optimistic projection is that maybe 2 million wetland acres might be protected from conversion over the next 10 years through a combination of the Conservation Reserve Program, Water Bank, Farmers Home Administration easement authorities, and the Fish and Wildlife Service land acquisition program.

To provide greater economic incentives for private stewardship, legislative changes must be made to either modify and expand existing easement and fee title acquisition programs or to create a new wetlands reserve that will compensate owners of wetlands on agricultural lands who protect wetlands permanently. Permanent easements rather than 10-year contracts must be employed. In addition, new legislation is needed to authorize and fund the restoration and subsequent protection of former agricultural wetlands.

Through this combination of strategies, combined with increased wetlands research, planning, and public education efforts which have been recommended by the Forum and others here today, we can stop the loss of our Nation's wetlands and begin to restore some of our past losses. We cannot achieve these goals, however, by conducting business as usual.

We as a Nation will have to invest in more aggressive and better-funded regulatory and nonregulatory programs. We can save money and protect wetlands, too, by not spending Federal money to directly destroy wetlands through public works projects or indirectly destroy wetlands through subsidies and tax breaks. Our investment in our Nation's wetlands will take commitment, but it will also bring a high rate of return. These areas provide enormous public benefits, the manmade substitutes for which are expensive and speculative.

On behalf of the Federation, the Environmental Defense Fund, and the Izaak Walton League, I encourage this Subcommittee to get on with the task of putting a stop to the agricultural conversion of wetlands. Thank you, Mr. Chairman, for the opportunity to appear before the Subcommittee today.

[The statement of Ms. Goldman-Carter can be found at end of hearing, along with Attachments A thru E.]

Mr. STUDDS. Thank you very much.

Next, speaking for the American Farm Bureau Federation, Mr. Mark Maslyn.

Mr. Maslyn?

STATEMENT OF MR. MASLYN

Mr. MASLYN. Thank you, Mr. Chairman. On behalf of the Farm Bureau, I appreciate the opportunity to be here to address the topic of wetlands protection and agriculture.

As was noted several times this morning, there has been a historical shift in public attitudes toward wetlands from the early days of this country to recent years, when we now recognize the many benefits that wetlands do provide to society. Farmers are not immune to this. I think most of them view themselves as conservationists and protectors of the land.

This changing public attitude that views wetlands as public resource to be protected does not always mesh with the fact that most of these resources are on private property. While many of the benefits of wetlands protection accrue to someone other than the landowner, the cost and the burden of regulatory compliance falls to the landowner. From an agricultural perspective, one of the major shortcomings of the current wetlands protection efforts has been a failure to recognize private property rights.

We would also urge that the Committee, in an effort to protect wetlands, look closely at the need for updated information and data on the rate of wetlands loss and alterations. There is a great deal of old data that has been referenced and used in many ways that could shift the focus from solving the real problem.

Some of the studies that have been referenced, not only in this hearing but also by the Wetlands Forum, were conducted in the fifties and sixties. In the early eighties there was another study done that provide some significant discrepancy between the earlier studies.

I would also like to briefly comment on some of the strengths and weaknesses of the current wetlands policy from the perspective of farmers and ranchers. As mentioned earlier, many of the conflicts over wetlands protection can be traced to the issue of private property rights.

A current regulatory program such as the 404 program or the Clean Water Act are viewed as all stick and no carrot. They invite conflict over the question of private property rights and the right of an individual to secure the fullest and best use of that property. A frequent dispute is over the lack of consistent definitions in the interpretation of what constitutes a wetland. These definitions not only vary among and within Federal agencies but at all levels of Government.

Farmers and ranchers need to have permit applications acted upon in a timely manner. Applications to perform stream bank work that either protects farm and ranch land from flooding or stream banks from eroding has often taken months for approval. The farmer is often presented with a Hobson's choice of acting to protect his land in the absence of a permit, and risking penalty and fine in the event that that permit application was denied.

I would also like to comment briefly on the National Wetlands Policy Forum, to which Farm Bureau was a participant. We fully support the recommendations calling for a consistent definition of wetlands as well as efforts to reduce delays in the permitting process. There are other recommendations that as an organization we are going to be looking at very soon and developing a position on.

The Forum report cautioned against modifying or weakening the existing permit exemptions for normal farming activities, silvaculture, and ranching activities as well. On that point, Farm Bureau believes that continuation of the existing 404 exemptions for routine agricultural practices should be one of the conditions for assumption of the 404 program by the States.

The Forum also suggested that compatible economic uses of wetlands be encouraged rather than impeded. Such uses include timer harvesting and the production of native wetland crops such as cranberries, also hunting and fishing. Many of these types of agricultural activities can be conducted without significant loss of wetlands function.

We are particularly encouraged that one of the major themes of the report was increasing the use of incentives and education and information to private landowners. The Forum realized that the regulatory programs alone would not halt wetlands alteration. Instead, it emphasized increased economic incentives to landowners, such as wetlands reserves, easements, and cost-sharing for restoration.

Mixing a few carrots with the regulatory stick makes good sense, and it will promote cooperation rather than confrontation. In addition, the increased information and education to wetlands owners on the significance of wetlands will promote public awareness and understanding of their value.

In closing, I want to underscore the need to recognize that private property rights are a central issue in wetlands protection. We must reconcile the view that this is a resource that is valued by the public with the fact that they are indeed private property. Compensation, economic incentives, compatible uses, as well as education and information, are all tools that should be more fully utilized.

I appreciate the chance to be here, Mr. Chairman, and look forward to answering your questions.

[The statement of Mr. Maslyn can be found at end of hearing.]

Mr. STUDDS. Thank you, sir.

The final member of the panel, Mr. Ralph Heimlich, who is an agricultural economist with the Department of Agriculture.

Mr. Heimlich?

STATEMENT OF MR. HEIMLICH

Mr. HEIMLICH. Thank you, Mr. Chairman. I appreciate the opportunity to present to the Subcommittee an evaluation of the swampbuster provision. My remarks concerning wetland conversion will focus on two topics: which areas of the country with high potential for conversion are most affected by agricultural programs and how changes in agricultural prices over time affect wetland conversion.

The swampbuster provision, Title XIIC of the Food Security Act of 1985, was enacted to improve consistency between two goals:

farm income and price support provisions and wetland conservation. Consistency is improved by denying farm program benefits to producers who convert wetlands to agricultural production, but improved consistency may not ensure that wetlands are protected from conversion. Although agricultural production accounted for the largest share of wetland loss in the recent past, the swampbuster provision will only be effective where farmers' loss of benefits is sufficiently high to discourage conversion.

I analyzed the extent to which denying farm program benefits under the swampbuster provision might influence owners of wetlands which are subject to agricultural conversion. Using data on the extent and location of wetlands, I identified 17 million acres subject to conversion out of the 78 million acres of rural, non-Federal wetlands inventoried by the Soil Conservation Service.

Wetlands subject to conversion include wetlands rated in 1982 as having high or medium potential for conversion and wetlands located in counties which experienced large percentage increases in cropland in 1980 and 1984. The importance of Government payments was measured by the ratio of direct Government payments to net farm income in each county in 1984.

Direct Government payments included deficiency payments, Commodity Credit Corporation loans, and direct FmHA grants, but excluded crop insurance and subsidized loans. It was assumed that the higher Government payments relative to net farm income, the more effective the swampbuster provision would be in preventing wetland conversion.

Only about a third of the wetlands subject to agricultural conversion (some 6 million acres) are located in counties where Government payments were more than half of net farm income. Accordingly, the swampbuster provision will likely be highly effective in parts of the lower Mississippi bottomlands in Arkansas, some counties in the Southern Coastal Plain, part of Nebraska's Sandhills, and part of the Klamath River Basin in Oregon.

Much of the Prairie Pothole region of Minnesota and North Dakota is less dependent on Government payments than these previous areas, but payments are still sufficiently high that swampbuster provisions will probably be effective.

Because of the crop mix and low program participation, the swampbuster provision will probably not affect wetland conversion in Florida, central Alabama, North and South Carolina's Pocosin wetlands, Wisconsin and upper Michigan, and coastal Massachusetts and Maine.

Improving agricultural prices over time would probably reduce the effectiveness of the swampbuster provision from these levels. Farm program participation rises when agricultural commodity prices are low and market demand is weak, and participation falls when prices rise and demand is strong. Thus, the impact of the swampbuster provision is strongest when market incentives for crop production are weakest, and diminishes when prices rise and farmers are most likely to develop new cropland.

Although direct Government payments were 36 percent of net farm income in 1987, payments were above 25 percent in only 7 years since 1960. Acreage idled under annual acreage reduction programs was 22 percent of land used for crop production in 1987,

but was less than 10 percent for 19 of the years since 1949. If the 1990s bring smaller global crop supplies, reduced stocks of commodities, and higher prices, the leverage farm program benefits now exercise on wetland conversion is likely to decrease.

The swampbuster provision, in conjunction with the Tax Reform Act of 1986, eliminated or reduced many of the remaining indirect Federal incentives for wetland conversion, and helped improve consistency in Federal policy towards wetlands. However, both the geographic distribution of program participation relative to wetlands and changes in participation over time in response to commodity prices limit how effective the swampbuster provision will be at protecting wetlands. Some refocusing of wetland acquisition and leasing programs may be needed if protecting remaining wetlands from agricultural wetlands from agricultural conversion is a public policy goal.

Thank you very much. I will be happy to address any questions that the Subcommittee has.

[The statement of Mr. Heimlich can be found at end of hearing.]

Mr. STUDDS. Thank you, sir.

Mr. Maslyn, I have to ask you, on the first page of your testimony you say that historically wetlands were altered for purposes that provided many benefits to society, and you then say that much of the District of Columbia was once wetland.

[Laughter.]

Mr. MASLYN. That may be a contradiction.

Mr. STUDDS. Now are you implying, first of all, that at least with respect to climate this is no longer a swamp?

[Laughter.]

Mr. STUDDS. And, far more importantly, are you suggesting that somehow this country is better off because this area now provides habitat for politicians rather than for bullfrogs and waterfowl? And does your membership know you are up here saying these kinds of things?

[Laughter.]

Mr. MASLYN. Mr. Chairman, the Farm Bureau equivalent of the Office of Management and Budget, in reviewing my testimony, added some language that I later deleted, that suggested that the EPA take the first step in restoring its headquarters to original wetlands status.

[Laughter.]

Mr. STUDDS. I believe that. Oh, well, you will have to defend the general proposition that we are all better off. I am certainly not going to.

A general question for everybody: Do any of you not agree with the President's goal of achieving "no net loss" of wetlands?

[No response.]

Mr. STUDDS. Does anyone disagree with that goal?

[No response.]

Mr. STUDDS. Good—or interesting.

Do any of you believe that we can achieve that goal by making greater use of existing regulatory conservation easement and land acquisition programs, without any changes in law? In other words, broadly speaking, is current statutory law sufficient to achieve the President's goal?

Mr. PETERSON. I would say they are not, but I think we could go a long ways if we fully implemented some of the existing law and did some, maybe some fine-tuning of existing law. I think all of us, or at least most of us, agree that there need to be some changes in law, yes.

Mr. STUDDS. Does anyone feel that there does not need to be any change in law in order to achieve the President's goal? Mr. Maslyn?

Mr. MASLYN. Mr. Chairman, as I indicated in my testimony, I think that there needs to be a greater reliance on incentives and assistance and information, making the public more aware of the value of wetlands, rather than reliance on regulatory programs. I don't think there are enough enforcement officers in the world to adequately enforce wetlands regulations. You need to rely on the cooperation of the landowners.

Mr. STUDDS. Mr. Heimlich, you have done an assessment, obviously. You just talked about your assessment of the swampbuster program. Your conclusion is that it will be effective in deterring wetland loss roughly on only a third, or very effective on roughly only a third of the wetlands which could be converted to agriculture in the near future.

Several witnesses today have criticized the implementation of that program. Your testimony seems to indicate that even if the implementation problems were corrected, that your conclusion probably would not change substantially. You also note that if the farm economy improves in the next decade, the Farm Bill will be even less effective in deterring wetland losses.

Are to conclude from what you say that you believe that if we are serious about stemming agriculture-related loss in wetlands, we are going to have to consider expanding the regulatory prohibitions against destroying wetlands?

Mr. HEIMLICH. I wouldn't go so far as to say that, but I certainly think you are not going to achieve "no net loss" on the strength of swampbuster alone. It is a well-intentioned program to achieve consistency, but it was never really intended as a wetland protection policy per se.

Mr. STUDDS. OK. Fair enough. Obviously a lot of what we do or don't do in the future is going to depend on our assessment of the adequacy or inadequacy of current laws and current policies. Mr. Maslyn, you question whether our existing laws are even constitutional, if I understand you correctly. You certainly are unhappy with how some of them have been implemented. I don't mean to be caricaturing your position. I am trying to draw a couple of extreme differences to get a couple of you in a dialogue in a moment.

Mr. MASLYN. Well, I made reference in my written statement to a recent Supreme Court decision that recognized the concept of taking.

Mr. STUDDS. Sure. You have, it is fair to say, you have some very serious problems with the implementation of existing law?

Mr. MASLYN. Yes.

Mr. STUDDS. You think they do, in some cases, raise private property rights that may even be at the level of a constitutional question?

Mr. MASLYN. Yes.

Mr. STUDDS. Okay, and by contrast, Ms. Goldman-Carter proposes expanding the 404 program to cover agricultural drainage and clearing in addition to filling. Now I would like each of you to respond to the central concern of the other. Mr. Maslyn, how can we stop wetlands losses without expanding 404? And Ms. Goldman-Carter, how can we expand 404 without infringing on the legitimate rights of farmers?

Ms. GOLDMAN-CARTER. I will take the first crack at it. I think we agree to some extent on this. I agree, and the National Wildlife Federation, the Environmental Defense Fund, and Farm Bureau all participated in the Forum Report and in the Forum, and there was an agreement, that if we are going to reach a "no net loss" goal of wetlands, we are going to have to deal with this basic issue: that we have wetlands which are a public resource with public benefits, located largely on private lands, and that we have to deal with the private property interests at stake.

The National Wildlife Federation, along with the Forum, supports the use of economic incentives to try to accommodate some of those private property concerns. On the other hand, we don't agree that expansion of the 404 program raises constitutional problems. It can on occasion; just like any kind of control, land use control, or zoning restriction on a local level.

Anything that tells anybody what they can do with their land theoretically could have takings problems, but the reality is that Supreme Court law essentially requires regulation to the point of a landowner losing virtually all economic use of his property in order to trigger a constitutional taking. The track record is that the Corps of Engineers has been running the 404 program for almost 17 years, apparently issuing or denying on the order of 10,000 permits a year, and to my knowledge there is no case decision at this point in time that has resulted in a court finding an actual taking of private property as a result of that program.

Mr. STUDDS. Mr. Maslyn, how about her concern?

Mr. MASLYN. I am going to suggest that the farmers' major problems with the regulatory programs as they exist now are not with the question of whether there should or should not be a regulatory program to protect wetlands, but rather with regard to inconsistent definitions within States, within Federal agencies, and among Corps regions, as to what is a wetland, and as to just what qualifies for the "normal farming practice" exemption. From our perspective, that is where we get most of our calls and letters from farmers, and that is where the conflict is the sharpest. I don't think that the existence of a regulatory program that allows certain practices to continue to take place, but draws a line at other activities, is the major concern of agriculture.

Mr. STUDDS. The gentleman from California.

Mr. BOSCO. Thank you, Mr. Chairman.

One of the problems that the Congress and the courts have had over the years is how to define wetlands, and I think probably all of us agree that this remains a problem. Given that, how have these surveys defined wetlands in terms of the statistics on how much has been lost? Does anyone know that?

Ms. GOLDMAN-CARTER. I will make a stab at it. The Fish and Wildlife Service are obviously the experts on their own data, but it

is my understanding that studies that came out from the study period on which the statistics are built on our national historical losses from the fifties to the seventies, are based on some precursor data to the National Wetlands Inventory. I don't know for a fact, but I suspect that it used the Fish and Wildlife Service definition of wetlands, which is slightly different than the regulatory definition of wetlands that was used in the 404 program. It is slightly, generally broader, but that definition was used consistently for those results, so I think that is still solid data and it is based on one definition of wetlands used by the Fish and Wildlife Service.

Mr. Bosco. I would like to, if possible—and I probably should ask Fish and Wildlife—get a grip on what definition is being used, because I think the public is now becoming aware that there is a very drastic loss of wetlands but I don't think anyone has stopped to ask what does this mean. Does it mean the tidal basins and other areas that really do produce life and are necessary for the regeneration of nature? Is it the flyways that the ducks land in? Or is it the little puddles that you find all over the country? I mean, I would like to really have some grip on what is it that we are talking about? Some people have talked about draining drainage ditches on agricultural land. There are rice fields that get filled with water and then drained every year. I don't know whether this is credited with a gain or a loss of wetlands. Are any of you satisfied that the statistics are accurate?

Ms. GOLDMAN-CARTER. I think on behalf of the Federation we are satisfied that the statistics that are out there are solid and they are good. The problem is, the idea of actually trying to enumerate not only the wetlands that are out there but the wetland losses that have occurred across the entire country is a fairly formidable task. That is, I think, one thing we all agree on, is that one of the important tools that needs to go into future wetlands conservation, is to support the U.S. Fish and Wildlife Service's inventory efforts to try to upgrade and update this data on a fairly regular basis.

Mr. Bosco. Mr. Maslyn, you mentioned the statistics in your testimony. Do you have reason to believe that they are inaccurate, or are you just saying that they are outdated?

Mr. MASLYN. I thought, recalling the discussions during the Wetlands Forum debate that went on for a year, there was general concern about the reliability of the figures and frequent noting that the data that we have is old.

The studies that I mentioned in my testimony, one was done using data from the 1950s and sixties and early seventies, citing 400,000 to 500,000 acres in alteration. Another study that was done by the Office of Technology Assessment put the figure at 275,000 acres annually. There is a significant discrepancy there. Both of those figures were derived prior to the passage of the swampbuster provision in the 1985 Farm Bill.

I guess my only point was that we need to get a better handle on just what the data is out there on the rate of wetlands loss, and what is the role of agriculture in that.

Mr. Bosco. And I would add, how is the term "wetlands" defined?

Mr. MASLYN. That is correct. I think you can make a case that some alterations of wetlands can occur in acreage without signifi-

cant alterations in the total function of the wetland. I think that also should be taken into account.

Ms. GOLDMAN-CARTER. Can I respond briefly on the definition? I think this is a problem that doesn't need to be a problem, so I want to try to clarify it.

The wetlands definition at the Federal level has been a problem historically. One of the things that the GAO recommended, that the Office of Technology Assessment recommended, that the Forum recommended, was to get a consistent wetlands definition at the Federal level and a consistent way of identifying a wetland boundary.

That has been done now. It is new. It is as of January of this year. The manual is out in the field, so there are going to be some recurring problems in the transition to getting that uniform approach in place, but the fact of the matter is, it is there and the agencies have, I think, really worked hard to bring that to fruition. Once there is training on that out in the field, and if we can get people properly trained and the resources out there to implement it, that really should not be a problem at the Federal level.

I know in New Jersey at least, and some of the other States, we are starting to see the States pick up on that Federal definition. If that will happen, then maybe we really will come close to having one definition of wetlands across the board.

Mr. BOSCO. Well, I wasn't present for the unveiling of this new definition. I am glad that it is out there, and hopefully we can incorporate it, if it is a suitable one, into whatever it is that we do. But that draws me back to my original question: If there is a brand-new definition, do these statistics fit under that definition?

Mr. PETERSON. Let me not respond precisely but just point out that we say about half of the wetlands in the United States have disappeared since the Europeans came here. If you use this new definition, it might change to 42 percent or 54 or some other percent, but I don't think you would find a radical change.

The new thing about the definition, is it is consistent across agencies. At one time Fish and Wildlife Service had a habitat classification. Soil Conservation Service had a soils classification, and other agencies had a definition based on water presence. Now the definition has been unified, in which you look at soils, vegetation, and the permanency of water, and so you have a consistent definition.

I don't think this new definition would change the major thrust of the data. Because these statistics represent the fifties and sixties, primarily, the rate of loss probably has changed since the Conservation Reserve Program went in, and swampbuster. That is probably a valid criticism, but I don't think you would find the great sweep of the data would change. The great sweep of the data is probably reasonably correct.

Mr. BOSCO. OK. Thank you very much.

Mr. STUDDS. The gentleman from Louisiana, who was—what—an hour and a half late, during which time a significant percentage of his district probably disappeared.

[Laughter.]

Mr. TAUZIN. An acre every 15 minutes.

Mr. STUDDS. Yes. The gentleman is recognized before anything else happens.

Mr. TAUZIN. I want to follow up on that very point. Mr. Chairman, first let me thank you for allowing my statement into the record, as I was chairing the House at the time.

The point you make is a good one. In fact, while we have been here discussing this issue, Louisiana is losing an acre about every 15 or so minutes. Some say 18 minutes, some say 12, in that range. In fact——

Mr. STUDDS. Mr. Breaux used to remind us of that, and look what happened to him.

Mr. TAUZIN. Yes, he became a Senator. Who knows?

In fact, 80 percent of all the coastal wetland loss occurs in Louisiana. So you will know, if you haven't heard the figure, it is about 50 square miles a year.

Now here is the dilemma. You have all answered the Chairman's question, that you all felt that a no net wetlands policy was a good one, a good goal, one we ought to achieve. You all hesitated when he asked you whether or not there ought to be changes in the law to achieve it, but let's talk practical here for a second.

If Louisiana issued no more 404 permits, if everyone was denied next year, it has been conceded at a recent hearing in Louisiana—in fact, in Lake Charles, the Public Works Committee, Mr. Nowak chaired—most of the agencies there conceded the point that next year we would lose 50 square miles then, and if we issued no 404 permits again for the following year, we would lose another 50 square miles. In fact, the rate would accelerate. We expect about 65 square miles very shortly.

The question is, given the status of the current 404 permitting law and this new policy of no net wetlands loss, where do we go to pick up 50 square miles of new wetland to make up for the 50 we are going to lose in Louisiana this year? Anybody have an idea? How do you make that policy work?

Ms. GOLDMAN-CARTER. The question is, how do you achieve "no net loss" in Louisiana? When you say——

Mr. TAUZIN. No, no. How do you achieve it nationwide, when Louisiana is contributing 50 square miles loss that you have to make up somewhere else, if you don't change the 404 permitting system?

Ms. GOLDMAN-CARTER. The Forum recognizes, in establishing the "no net loss," and I think generally it is recognized that Louisiana and the problems that have contributed to the loss of wetlands in Louisiana is a unique problem.

Mr. TAUZIN. Thank you. That's the point.

Ms. GOLDMAN-CARTER. Does that satisfy you?

Mr. TAUZIN. That is precisely the point. It is the point that was made at the hearing in Lake Charles. It is a unique problem. It is unique because the causes of the wetland loss in Louisiana are going to be there if man is present and active or not.

In fact, if we leave Louisiana, if we all move out, we guarantee that the losses will occur. If we stay and fight, we have a chance to stop it or some of it, so man's activity in the wetlands in Louisiana is, by the very nature of the definition, necessary if we are going to save any of it. Otherwise we lose it.

Now here is the problem, Mr. Chairman, and one I would like you to address with me: The 404 permitting system is indeed a prohibition against destroying wetlands. What we have learned in Louisiana is that it also operates as a prohibition against protecting wetlands that are being lost through natural causes.

For example, it is basically a program that prohibits the use of fill material in a wetland area. It is the loss of the fill material, through the leveeing of the river systems in Louisiana, which is now depriving the wetlands of Louisiana of those sediments, that very same fill material. And if we are not permitted, in some sort of coastal restoration plan, to use those fill materials to restore the wetlands, to protect them, enhance them, to keep them from going into the ocean, we are going to lose them.

So we have a unique problem in Louisiana, at least, if not anywhere else in the country, of having a situation where the 404 permitting system—the only regulatory system to protect wetlands that we have, that I know of, to any large extent—operates in, if you will, exactly the wrong way to give us a chance to save what nature is about to take from us. I suppose what I want to ask you is, do any of you disagree with that or have any suggestions as to how we can deal with that?

Ms. GOLDMAN-CARTER. I guess, without knowing a lot more, I question that that has to be the result. The 404 program is a permitting program that doesn't prohibit the discharge of dredged or fill material, but requires a permit to do that.

Mr. TAUZIN. Well, the agency testified that it was a prohibitive program. They admitted that. The Corps admitted that to us that day, that its basic function is to stop you from filling in wetlands, so you have to get an exception to do it, and to get an exception maybe takes 18 months. By that time you have lost how many more acres and how many miles?

The Corps itself doesn't like to fight that battle. It doesn't like to go in and ask for permission to use fill material from the river, for example, to go and do restoration work. Instead, it takes it out to the deep water and dumps it into the ocean.

Ms. GOLDMAN-CARTER. I guess I would just—my position on it would be that the 404 program itself and the 404(b)(1) guidelines should accommodate wetlands, and does I believe legally accommodate discharges that are environmentally preferable, that serve to meet the goals of the Clean Water Act. Whether in implementation that is actually proving to be the case is another matter altogether.

Mr. TAUZIN. Well, our experience is that it is not, and that is the problem.

I point that out, Mr. Chairman, because Senator Breaux, who was the illustrious Chairman of this Subcommittee prior to the current Chairman, has introduced legislation on the Senate side dealing with that precise issue: to create the possibility, at least, of a State action plan in Louisiana on which the Corps has testified here today. That would be necessary for us to, in effect, have a different system of regulation that would encourage, and expedite permits that were clearly designed to preserve and protect, as opposed to a prohibitive system that denied us the right to use fill material to protect.

I bring that to your attention because you made the point for me earlier. We have a unique problem here, and if we are going to have a no net wetlands loss policy for America that doesn't take into account the unique situation that exists in coastal Louisiana, we are never going to achieve that goal, because you can't find 50 square miles of somebody's land to turn over to wetlands, to accommodate to this incredible loss in Louisiana each year.

Ms. GOLDMAN-CARTER. [Nods affirmatively.]

Mr. TAUZIN. You are shaking your head. I guess you kind of agree with that position?

I guess my next point is that, Mr. Chairman, we will be offering something comparable to Mr. Breaux' bill with some variations on it. We are working on some incentives——

Mr. STUDDS. Will this be subtitled "The Louisiana Re-Purchase Act?"

[Laughter.]

Mr. TAUZIN. The Louisiana Restoration Act, I suppose.

But, Mr. Chairman, it is serious. If we don't do something relatively soon in the way of changing the law, just as you brought out, I think successfully today, that if we don't change the law in the 404 permitting system as regards some areas of the country where it is not working or it is protecting wetland from man's destruction, we are going to lose on both ends of the scale.

We had testimony at your hearings earlier about Minnesota losing—what—7 million of its 8.7 million acres of prairie potholes, and the results are dramatic in the duck population in the flyway. We have seen it in Louisiana. The duck population has declined about in half.

Virginia Van Sickle, our Secretary of Fish and Wildlife in Louisiana, testified that we are in for a great shock in Louisiana, in that they are now beginning to gather evidence that 28 to 30 percent of the fish catch this whole country enjoys is from coastal Louisiana, they expect we will begin to experience in a few years from now a dramatic and sudden, devastating decline as a result of what is happening there.

So it is big. It is enormous, and I only want to point out to you that we have a unique problem. Even if we solve the agricultural problems, the sodbuster provision—swampbuster provision, rather--and if we do something with 404 in regard to agricultural lands, if we ever clarify what wetland is and what a water-dependent use is and all the intricacies of the 404 act, even if we turn the program over to the State of Louisiana, we can't solve our problem under current law. We can't solve it because the program doesn't work to encourage landowners, and they are private landowners, to do what is necessary to save their own land any more.

Mr. PETERSON. Mr. Chairman, let me suggest, there are a few things that can be done in Louisiana. Let me suggest, you mentioned waterfowl, there is a system called greentree reservoirs where you combine waterfowl and fish and the growing of bottomland hardwoods. This is using the functions of a wetland in a positive way. I think you can get easements in Louisiana to do that in a lot of areas, fairly economically.

Mr. TAUZIN. Yes. In fact, they are being explored, but what we need to look at is something perhaps even more dramatic than that. I guess this is sort of a preview, Mr. Chairman.

Mr. STUDDS. The mind boggles. Is there a price tag on this dramatic action?

Mr. TAUZIN. Actually not, because it is going to require mostly people in Louisiana to undertake it. What it is, is a system of mitigation, and mitigation banks that would allow landowners to make private investments in saving the land and then bank the mitigation as a saleable asset, as we did in nonattainment areas, to try to encourage them to make those private cash investments. Would concepts like that fit into the general realm of the recommendations you have made here today?

Mr. PETERSON. They would, in the ones that we have made. Let me suggest that I hope you don't decide you have to destroy something before you can mitigate.

Mr. TAUZIN. Sure.

Mr. PETERSON. The best mitigation would be moving in ahead, before the fact, and taking positive action such as easements and so on. Let me point out, as we said in our testimony, regulation is not free. Many people think if you regulate something, you are getting free goods. Actually, it may be that an easement of some kind is cheaper than regulation, where it still allows some continued use of the land for some productive purpose. I think there are enormous opportunities in Louisiana to combine wise use of the resource with protection of wetlands.

Mr. TAUZIN. In fact, let me back you up. What the testimony at that last hearing revealed was that it was a lot cheaper for us to save an acre of Louisiana wetlands that we are going to lose to nature, than it is to create one anywhere in the country.

Mr. PETERSON. I think that's right. Let me point out also that part of the problem that causes you to lose all that is past flood control which was necessary.

Mr. TAUZIN. Yes, 38 States——

Mr. PETERSON. But I think there is a great opportunity, as I said in my testimony, for the Corps of Engineers now to look at some positive things that can be done to create wetlands or to restore wetlands, and not look at their role as purely regulation. The 1986 act gives them all kinds of authority which has not been implemented to date. They have not requested any funding for it.

Mr. TAUZIN. That's right.

Mr. PETERSON. And the Bureau of Reclamation, the same thing. In other words, if we set an objective, there are a whole bunch of ways to reach it, and I think we have to look at being creative in ways to reach it.

Mr. TAUZIN. I appreciate that. In fact, the Breaux bill does that, as well. It nominates the Corps to take a lead in protecting and preserving as well as handling these prohibitive permit systems.

Mr. Chairman, thank you very much for the time.

Mr. STUDDS. Let me just say that, without objection, the uniqueness of Louisiana is stipulated in every respect.

Mr. TAUZIN. Every respect.

Mr. STUDDS. Every respect.

Mr. TAUZIN. Absolutely.

Mr. STUDDS. However, the Chair would still like to understand the price tag of the Breaux legislation. We have all worked with John long enough to know that one has to look very carefully at these matters. Was the gentleman here during the OCS Lands Act amendments?

Mr. TAUZIN. The gentleman, Mr. Breaux, is proposing, as you well know, some sharing of OCS lands revenues into a national program that would help do that, but if the gentleman would yield just a second again, one of the main features of the bill that Mr. Breaux proposes is State action and private property owner action. In fact, we amplified that in the draft we designed for the House that I would like you to look with some favor upon.

Mr. STUDDS. We will certainly look at it with considerable interest. I just can't help but reflect back on, in the mid-seventies, when we had an ad hoc select committee, God help us all, to rewrite the Outer Continental Shelf Lands Act. One of the Senators from Louisiana sent over a proposal that was so imaginative that not even Congressman Breaux could support it. It purported to be a method of revenue-sharing from the OCS revenues, but when the staff computed the formula, 100 percent of the money went to you know which State, for the entire country. The imagination of those who represent the State of Louisiana is awesome.

Mr. TAUZIN. It is not just imagination, Mr. Chairman. It also reflects the real world. The real world is that Louisiana is producing for this country about 80 percent of all the monies that are obtained——

Mr. STUDDS. You are very right. I don't want to prolong this. I have to make one observation.

Mr. TAUZIN. Let me make one observation before that.

Mr. STUDDS. Is the gentleman suggesting that this is without—that the hand of man has nothing to do with this?

Mr. TAUZIN. Well, that's the point I am going to make. The hand of man had a lot to do with it, and the hand of man happened to be oil companies that got easements to go through our wetlands to produce the Federal reserves of oil and gas.

Mr. STUDDS. To say nothing of the levees on the Mississippi.

Mr. TAUZIN. Of course, but the land that is degrading between the levee systems to a large extent has been identified by environmental groups as partially, at least acceleratingly being lost by the hand of man that Louisiana allowed in to produce the Federal reserves of oil and gas. Now you can make a natural connection between the effort that Louisiana is making, and Massachusetts and California will not make, in offshore production, and the need for Louisiana to ask something in return for the damage we suffer.

Mr. STUDDS. Where have I heard this before?

[Laughter.]

Mr. TAUZIN. And you are going to hear it again.

Mr. STUDDS. I assume that the gentleman has recognized the potential consequences of this phenomenon for redistricting.

Mr. TAUZIN. The truth is, I will be representing fish very soon if you don't help me.

[Laughter.]

Mr. STUDDS. That is not an altogether undesirable prospect, I will say to the gentleman.

Let me just thank the Members of the Subcommittee and the members of the panel. It has been a long day. They are patient. I appreciate, we appreciate your patience. It is also obviously a problem, like so many, that is at least as complex as it is important, and we are going to try to figure out what we should do before doing it, which apparently is the position of the administration as well, and we look forward to hearing that.

Thank you all very much. The Subcommittee stands adjourned.

[Whereupon, at 4:00 p.m., the Subcommittee adjourned subject to the call of the Chair.]

[The following was submitted for the record.]

STATEMENT OF
DAVID G. DAVIS, DIRECTOR
OFFICE OF WETLANDS PROTECTION
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON FISHERIES AND
WILDLIFE CONSERVATION, AND THE ENVIRONMENT
COMMITTEE ON MERCHANT MARINE AND FISHERIES
U.S. HOUSE OF REPRESENTATIVES

MAY 17,1989

I am very pleased to have the opportunity to address this Committee on wetlands issues. We are seeing many signs of increased awareness of, and concern about, the loss and degradation of our nation's wetland resources. It is very gratifying indeed to see Congressional interest in wetlands issues as demonstrated by this hearing today.

This Administration is committed to improving the protection and management of the nation's wetlands. President Bush, in his 1990 Budget Statement, called for a goal of "no-net-loss" of wetlands. Achieving this goal will be no easy task and will require cooperation and action from each level of government, along with the private sector.

Although considerable progress has been made in the effectiveness of wetlands protection both at the federal and state levels, new pressures are arising which challenge each step forward. For example, coastal areas now have some of the best wetland protection mechanisms through the Section 404 Clean Water

Act program, state permit programs (often under Coastal Zone Management) and even special zoning on the local level. Nevertheless, there are continued population growth and development pressures in these same areas. Likewise, in many of the nation's agricultural areas the role of USDA's Swampbuster program has become critical as cropland values bringing increased pressures to convert wetlands for agricultural production.

Even when wetlands are protected from physical threats, they may be threatened by contamination and other degradation from close proximity to developed areas. As these pressures increase, we need to look to ways to improve the effectiveness of our existing programs as well as examine additional incentives and disincentives to protect and restore wetland resources.

Today, I would like to reflect upon the implementation of the no-net-loss goal and discuss ways in which EPA programs can contribute to this overall goal.

No-Net-Loss Goal

Much of the recent increase in awareness and concern for wetlands issues can be attributed to the work of the National Wetlands Policy Forum. This group, which represents a very broad array of interests, forged a set of consensus recommendations. The Forum report points out the complexity of wetland issues as well as the solutions, and concluded that all sectors of society

must play an active role in order to bring the problems under control. The Forum's recommendations include actions to demonstrate federal leadership in wetlands protection and management; actions to improve federal stewardship of wetlands on public lands; actions to strengthen and improve federal programs within existing laws to achieve the goal; and actions to improve the scientific basis of wetlands decisions. The Forum recommends the components of a mitigation policy for all agencies. Such a policy would be factored into agency actions and decisions made under the National Environmental Policy Act.

On the federal level, the President has asked the Domestic Policy Council to establish an inter-agency task force on wetlands to recommend ways to revise and strengthen the current Presidential executive order on wetlands. EPA will be an active participant in the task force. It is premature to indicate what specific changes the task force will recommend.

The task force will also coordinate and assess implementation of the goal. One issue the task force will wrestle with is how to interpret and achieve a no net loss goal. Such a goal does not imply that every wetland will be untouchable in all cases. Nevertheless, given the magnitude of past losses (over one-half the wetlands in the continental U.S. since European settlement), and the fact that we continue to sustain

wetland loss and degradation, a substantial reduction in the loss of existing wetlands is needed to rein in the problem.

Another difficult issue for the inter-agency task force to address is how to monitor and assess progress towards achieving the goal. There is no simple solution to this complex issue. Additional monitoring of wetland losses and gains may be necessary. An appropriate scale for measuring progress - by state, or ecological regions within or across state boundaries - will have to be established. In addition, monitoring will be needed on that scale.

The question of what to measure to determine progress on the goal is another challenge to address. The ultimate concern is protection of the multiple functions wetlands perform. However, these functions are often very difficult to measure without extensive field work. For an individual site, wetland functions are indeed taken into consideration. For purposes of accounting progress towards achieving the national goal, however, wetland acreage will most likely be used as a surrogate measure for functions because of our limited ability, both scientifically and logistically, to account for wetland functions. At the same time, however, we should develop new scientific methods to identify and measure wetland functions on a large scale.

Restoration of previous wetlands will be a key factor to contribute to the goals for wetlands. Some wetland losses such as ongoing losses due to past projects, and those due to forces such as sea-level rise, will continue outside the context of regulatory protection efforts.

One particularly ripe area to encourage restoration efforts is coastal Louisiana where the loss rates are 40-60 square miles per year. These coastal wetlands are of significance to the entire nation. They comprise forty percent of the country's coastal wetlands. These productive marshes support the largest coastal fin and shell fishery in the country, producing two billion pounds annually (which is approximately 30% of the nation's annual commercial harvest). Responding to these losses as part of its overall efforts to protect coastal waters, EPA's Office of Marine and Estuarine Protection is contributing funding to the state for two projects to divert sediments, and to build and vegetate terraces to restore coastal wetlands. While this is a relatively small scale effort in the face of a large scale problem, we hope that it will demonstrate techniques that would be effective if applied throughout coastal Louisiana.

A second area particularly appropriate for wetlands restoration is in agricultural areas across the country which are experiencing water quality problems due to runoff of sediments and nutrients as identified in state nonpoint source assessments.

Restoring wetlands and buffers in these areas could have a significant benefit for water quality, as well as for flood protection and wildlife. These benefits can extend to the water quality of downstream bays and estuaries as well as to enhance the water resources within the immediate area. EPA is working with the Department of Agriculture to identify stronger linkages between water quality goals and programs like the Conservation Reserve. We are also exploring potential changes to the 1990 Farm Bill with the USDA to enhance opportunities to protect and restore wetlands.

Within the regulatory program, however, EPA approaches wetlands restoration and creation to replace natural wetlands with caution. The problem with relying too heavily on the restoration or creation of wetlands to offset losses of existing natural wetlands is the very high degree of risk still associated with such attempts. Studies of the short-term success of restoration and creation projects indicate that at least one-half have failed in some respect. Long-term success is even more uncertain, and very few studies are available assessing the replication of wetland functions over time. In this regard, the development of an interagency mitigation policy continues. We have provided Army with a draft mitigation policy for review and comment.

EPA's Role

In January, former Administrator Lee Thomas issued a wetlands action plan for the Agency describing short-term actions we can take to help implement certain Forum recommendations. This plan provided a starting point to describe the types of actions EPA can take to contribute to the goal of no overall net loss of wetlands. The actions fall within the following seven areas:

- Providing technical support and participation in the application of planning approaches to protect wetland resources.

- Providing guidance, technical assistance, and support to enhance the role of state, tribal, and local governments in both regulatory and nonregulatory wetlands protection efforts.

- Working with the Corps to enhance the level of protection provided by the Section 404 regulatory program, particularly in the areas of enforcement.

- Working with other federal agencies to develop a wetlands mitigation policy.

- Increasing public awareness of wetland functions and values, Clean Water Act programs affecting wetlands, and nonregulatory approaches to protect wetlands.

- Developing and testing methods to assess the cumulative effects of wetland loss and degradation.

- Encouraging wetlands restoration and creation as a method for increasing our nation's wetland base.

Within this framework, EPA has initiated many different activities. I would like to highlight just a few to illustrate the types of actions we have underway. EPA's Office of Wetlands Protection is working with the Corps to improve the effectiveness and efficiency of the Clean Water Act Section 404 program. The agencies have made significant progress in recent months which will contribute to the program's effectiveness and efficiency. In January of this year, the Department of the Army and EPA signed two Memoranda of Agreement (MOA) on enforcement, and on geographic jurisdiction and the Section 404(f) exemptions. In addition, EPA, Army, Fish and Wildlife Service and Soil Conservation Service recently agreed on a Federal Manual for Identifying and Delineating Jurisdictional Wetlands.

We are expanding our Advance Identification (ADID) program of particularly threatened or valuable wetlands to improve

protection and provide additional information and predictability to permit applicants. We have drafted guidance for our regions and will be preparing additional technical information and guidance for interested states and localities.

We are also participating in and examining the results of a variety of other planning mechanisms which have many potential benefits including: coordinating wetlands protection efforts, improving the efficiency of the permit program, incorporating the cumulative effects of wetlands loss within a watershed, and identifying areas where wetlands restoration efforts would be most effective and beneficial. Working jointly with the Corps, we have over 40 ADID projects, or combinations of ADID with other planning processes, underway or completed across the country.

EPA also has efforts underway or planned to integrate wetlands more fully into our own programs. The National Estuary Program is factoring sensitive aquatic habitats into its guidance, and wetlands protection is an important consideration of many of the Estuary Management Conferences. For instance, the San Francisco Bay Conference has an Action Plan Demonstration Project underway to restore wetlands at eight critical sites throughout the bay. The Conference is also establishing a trust fund for future restoration projects in the bay. The Chesapeake Bay program has developed a wetlands policy as one component of its bay agreement. This policy encouraged the state legislature

in Maryland to pass its own inland wetlands legislation this past session.

One mechanism EPA and other Federal, State and local agencies are using to coordinate their own water programs is multi-objective river corridor management. The goal is to combine many different program objectives along river segments in order to maximize their benefits and ensure that action taken for one objective minimizes interference with other objectives. The numerous programs along a river may include: non-point source controls; stormwater and wastewater management; floodplain management; navigation; flood control; wetlands protection and restoration; recreation, access, and aesthetics; and estuary and coastal waters restoration and maintenance. EPA has hosted two workshops focusing on examples of river corridor management, and illustrating "soft-engineering" and biological engineering alternatives to flood protection and pollution control.

An example of a river corridor project is one initiated by EPA in the Delaware River / Delaware Estuary. In this project, several EPA programs (non-point source, wetlands, estuaries) and the National Park Service's (NPS) river corridor management program will work with state and local governments to address environmental issues across the watershed. The project will link needs identified in EPA's Delaware Estuary Program with

community river corridor conservation plans developed upstream by the NPS.

EPA is also integrating wetlands into the water quality standards program. We are funding three state pilot projects to develop wetland-specific water quality standards. In addition, we will develop guidance for the states to help them designate wetland uses that reflect their environmental functions, and to tailor existing water quality standards to protect those uses. We have designed a research plan to develop water quality criteria for wetlands.

One application of the standards is the state authority for water quality certification under Section 401 which provides a very good opportunity for states to play a more active role in decisions affecting their wetlands and other water resources. Section 401 certification serves as a mechanism for states to ensure that federal permits and licenses which may involve a discharge are consistent with a state's water quality standards and other state laws related to wetlands, water quality, and aquatic resource preservation and enhancement. For many states, 401 certification can serve as a tool for states to "get their feet wet" prior to considering assumption of the Section 404 program and without major legislative changes on the state level. EPA is drafting a handbook for states to aid in the application of 401 certification to wetlands.

In closing, I would like to emphasize my enthusiasm for the new directions which the Administration has committed to take for wetlands in this country. We look forward to working with the Domestic Policy Council's task force as it moves forward to coordinate federal policy. We also look forward to an increasing partnership with state and local governments, recognizing that there are many facets to wetlands protection and only if we work together can we hope to turn the tide on wetlands loss and degradation in this country.

TESTIMONY OF DR. RALPH MORGENWECK, ASSISTANT DIRECTOR FOR FISH AND WILDLIFE ENHANCEMENT, U.S. FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, COMMITTEE ON MERCHANT MARINE AND FISHERIES, U.S. HOUSE OF REPRESENTATIVES, CONCERNING WETLAND CONSERVATION

May 17, 1989

Mr. Chairman and Subcommittee members, thank you for this opportunity to discuss the wetland conservation activities of the U.S. Fish and Wildlife Service (Service) and ways we can work together to end the destruction of our Nation's wetland resources. The committee is to be commended for taking the initiative to conduct this oversight hearing on this timely and important natural resource topic. The Service is excited over the prospect of a renewed national commitment to strengthen our sense of stewardship for wetland resources.

This afternoon, I would like to highlight some of the things the Service is doing to protect, manage, restore, and enhance wetlands. I will relate these activities within the framework of the President's goal of "no net loss" of wetlands. In addition, I want to briefly discuss the state of this Nation's wetland losses and some of the causes of those losses.

As you know, an inter-agency wetlands task force is being established under the auspices of the Domestic Policy Council. The task force will review the existing executive order on wetlands protection, as well as existing laws and regulations, and formulate an approach to the "no net loss" of wetlands goal.

WETLAND LOSS

Wetlands are among the most biologically diverse and productive ecosystems. The effects of wetland losses in the United States that have concerned natural resource professionals for several decades have now generated general public concern. You are certainly aware of the statistics on wetland losses: over 54 percent of the 215 million acres of wetlands we believe existed in the contiguous U.S. at the time of European settlement have been lost.

Abstract statistics on losing over 116 million acres of our original wetland acreage are now evident in terms of reduced wildlife populations, poor water quality, reduced natural flood water storage capacity, increased flooding, decreased soil moisture, lower ground water tables, and more frequent and severe drought conditions. To be sure, these problems are caused by a variety of factors in addition to wetland loss. However, wetland losses have had a direct effect on each of these problems. We are now beginning to understand that replacing many of the functions formerly provided gratis by nature may be an expensive proposition.

Based on wetland status and trends data produced through the Service's National Wetlands Inventory, the Nation experienced a net loss of nine million acres of wetlands between the mid-1950's and mid-1970's. Wetland losses continue at a level as high as 450,000 acres annually. By far the most important economic sector

absorbing wetlands is the agriculture sector. Agricultural development accounted for 87 percent of wetland conversions, urban development for eight percent, and other development for only five percent of the losses. Today, only about five percent of the land surface of the lower 48 states is wetlands. Information on the current status and trends of wetlands will be available in 1990.

Central to the discussion of the future of wetland conservation is the fact that an estimated 74 percent of the remaining wetlands in the continental United States are privately owned. Public ownership of all wetlands is neither feasible nor desirable. Thus, solutions to wetland conservation issues depend to a great extent on private stewardship.

As highlighted in the Secretary of the Interior's December 1988 report to Congress on "The Impact of Federal Programs on Wetlands," the Federal Government needs to accept its share of the responsibility for many of these losses up to this point in time. There has been no national policy to ensure consistency among all Federal programs with regard to wetland conservation. As a result, many of these programs have not fully considered the functions and values of wetlands. Other programs still encourage wetland drainage and conversion.

The Department fully supports the national goal of "no net loss" of wetlands as enunciated by President Bush. As a Nation and as a government, we can achieve the balance that would be required by this policy. If you consider wetland conservation in terms of a

ledger-sheet account, our annual losses, or outlays, are running at 300,000-450,000 acres while our gains, or income, range from 20-25,000 acres. This means that we have a deficit of as much as 425,000 acres annually. Each year, almost twenty times more wetlands are destroyed than are restored or created. To achieve the goal of no net loss, therefore, we must cut our losses and increase our gains.

SERVICE WETLAND ACTIVITIES

The Service is the primary agency in the Department for wetland initiatives and has had a broad and longstanding commitment to wetlands protection, management, restoration and enhancement. As evidence of this commitment, I offer the following examples of current activities, nearly all of which fall into three general areas that support the goal of "no net loss": (1) wetland mapping, status, and trends reports; (2) activities to reduce wetland losses; and (3) wetland restoration, enhancement and management activities.

Mapping, Status and Trends Reports

National Wetlands Inventory -- The Service, in cooperation with State and Federal agencies, is mapping our wetland resources nationally. Approximately 60 percent of the lower 48 states, 16 percent of Alaska, and all of Hawaii have been mapped since 1979. The lower 48 states will be completely mapped by 1998 and Alaska will be completed as soon as practicable thereafter.

In 1983, the Service completed the first comprehensive and statistically valid estimate of the current national wetland acreage and the rate of wetland loss from the 1950's to the 1970's. Information from this status and trends report has been widely used in a number of major wetland reports, including the Conservation Foundation's National Wetlands Policy Forum Report. The Service will update the status and trends report in 1990 and every 10 years thereafter. The status and trends reports, when combined with the national wetland maps, could form the basis for assessing the effectiveness of a policy goal of no net losses of wetlands.

Reducing Wetlands Losses

Impact of Federal Programs on Wetlands -- The Service has been involved in assessing the issue of wetland losses resulting from government programs. The Service has been working with the Department's Office of Program Analysis to prepare reports to Congress, as required by the 1986 Emergency Wetlands Resources Act, that address this issue and include recommendations for making these programs more compatible with wetlands protection. The Secretary of the Interior submitted volume I to Congress on December 13, 1988. This report addressed wetlands losses due to Federal programs in the Lower Mississippi Alluvial Plain and Prairie Pothole Region. A summary of the recommendations contained in this report is appended to my statement. Volume II,

which addresses other problem areas throughout the United States, is being revised for upcoming agency review.

Permit Review -- The Service is one of the primary advisors to the U. S. Army Corps of Engineers (Corps) and the Environmental Protection Agency on matters relating to the Clean Water Act's Section 404 permit program. That activity regulates the discharge of fill material into waters of the U.S. The Service reviews approximately 10,000 individual public notices each year. Most of our recommendations on these public notices are intended to protect wetland resources. As part of the consultation process, the Service provides recommendations to the Corps to mitigate wetlands-related impacts.

Water Projects -- The Service also provides technical assistance to the Corps and Bureau of Reclamation on Federal water projects. In this role, the Service assesses the effects of various development projects on fish and wildlife resources and recommends measures to protect those resources. Wetlands have been a central focus of this effort.

Provisions of the 1986 Water Resources Development Act regarding protection, mitigation, and enhancement of wetlands associated with civil works projects increase our role as technical advisors to the Corps. These provisions were some of the most progressive legislative steps ever taken for wetland conservation and were highlighted by President Bush in his February 9 budget plan. The Service will work with the Corps to implement these conservation

measures to achieve wetland creation and restoration throughout the United States.

Farm Bill -- The Service is actively working with the Department of Agriculture and American farmers through our Farm Bill program. We provide technical assistance to state agencies, the Soil Conservation Service and the Agricultural Stabilization and Conservation Service on matters relating to wetland identification and on exemptions to the wetland conservation provision (Swampbuster) of the 1985 Food Security Act.

Contaminant Analysis -- Over 90 percent of the Service's environmental contaminant work deals with wetlands. Our work centers on determining the potential for harm to fish and wildlife species from contaminants that have assimilated into wetlands. Non-point sources such as agricultural and urban runoff, mine waste leaching, and pesticide use, as well as irrigation drainage are major concerns. The major contaminants that appear to be problems are heavy metals, industrial pollutants, and agricultural chemicals. An Environmental Protection Agency study estimates that over 90 percent of superfund sites are contained in, adjacent to, drain into, or slope toward wetlands.

Endangered Species -- More than one-third of the nation's threatened and endangered plant species and one-half of the animal species are wetland- dependent. Protection of wetlands habitat will help to preserve listed and unlisted wetland-dependent species. In our efforts to protect and recover various of these

species, the Service has acquired wetland habitats critical to their survival.

Restoring Wetlands

Farm Bill -- Through a Memorandum of Understanding, the Service provides technical assistance to the Farmers Home Administration by identifying environmental resources such as wetlands on inventory land, by serving as wetland easement managers, by participating on review teams for conservation easements in exchange for debt forgiveness, by reviewing loan applications, and by recommending protective measures for inventory properties.

Through our Farm Bill program, the Service has initiated a wetland restoration program. Nearly 16,000 acres of wetlands were restored in 1988 and a restoration goal of 20,000 acres has been set for 1989. Restoring wetlands that have been converted to agricultural use is often cost-effective and highly successful compared to other types of wetland restoration. It also addresses many contemporary conservation issues, including soil erosion, ground water recharge, surface and ground water quality, safe and adequate water supply, stabilization of both flood and drought cycles, and enhancement of fish and wildlife habitat, as well as recreation. For these reasons, the Service views the restoration of wetlands converted to agriculture use as an important priority.

National Wildlife Refuge System -- The Service manages over 34 million acres of wetlands in our refuge system, of which 5

million acres is in the coterminous U.S. These areas were established principally for the protection of migratory birds and endangered and threatened species. The Service has been in the wetland restoration and management business for many years on our refuges. The efforts which we have undertaken would be applicable on a broader scale to development of a national wetlands restoration program.

We are proud of our record of wetland restoration through farm bill programs and on national wildlife refuges and we believe this to be the most significant wetland restoration program in the Nation.

Federal Grants -- The Service administers Federal Aid funding to the States and territories for sport fish and wildlife restoration activities that include many wetland conservation elements. Between 1985-1987, this assistance added over 15,050 acres of priority wetlands to the 12 million acres currently in State ownership throughout the Country.

North American Waterfowl Management Plan -- The Service is implementing the North American Waterfowl Management Plan, an agreement signed by Canada and the United States, that relies on wetland habitat protection, restoration, and enhancement to restore the continent's waterfowl populations to the numbers that had occurred in the early 1970's. Drought and the draining of low-lying land for agriculture and other development contributed to a drop in the continent's fall flight of waterfowl from 80 to

100 million ducks during 1970-79 to a record low of 62 million in 1985. The 1988 fall flight was only 66 million.

Major components of the Plan include: (1) establishment of population goals for ducks, geese and swans to be met by the year 2000 and of habitat protection goals for the U.S. and Canada; (2) recommended joint ventures between private and public entities to attain these goals; (3) research and development of surveys and data bases; and (4) listing of approaches to protect and manage wetlands. This Plan has targeted more than five million acres of key waterfowl habitat for protection in the U.S. and Canada through critical areas, providing incentives to private owners for restoration of wetlands, and improving habitat on existing wildlife refuges, military bases, and other public lands.

An important aspect of the Plan is the development of joint ventures. Nine joint ventures are underway, six of which are U.S. habitat ventures. One large Canadian joint venture, the Canadian Prairie Habitat Joint Venture, has also been undertaken. In addition, two species-specific ventures involving the black duck and Arctic nesting geese are also being pursued.

During January of this year, an agreement was signed between the Service and the Department of the Army to conserve and improve wetlands on more than 9 million acres managed by the Army Corps of Engineers. The properties include wetlands in navigation and flood control projects, many of which are important waterfowl habitat.

Land Acquisition/National Wetlands Priority Conservation Plan -- The Service has a continuing land acquisition program that is authorized by the Migratory Bird Conservation Act, Endangered Species Act, Fish and Wildlife Act of 1956, Recreation Use Act of 1962, Emergency Wetlands Resources Act and Fish and Wildlife Coordination Act. Funding for land acquisition is authorized by the Migratory Bird Hunting and Conservation Stamp Act (also known as the Duck Stamp Act), Wetlands Loan Act, and Land and Water Conservation Fund Act (LWCF). As you are aware, the Service conducted a signing ceremony on May 9 to commemorate the first sheets of the 1989 Federal Duck Stamp. Revenues from the sale of these stamps will be used to acquire additional wetlands for the National Wildlife Refuge System.

Acquisition of wetlands that have particular social, ecological, or biological values or management importance will continue. During FY 1988, the Service acquired 65,846 acres by obligating $31.7 million from the Migratory Bird Conservation Fund and, as of March 31, had obligated $14.8 million to acquire 32,831 acres of wetlands during FY 1989. However, the Service recognizes that it will never be feasible or desirable for the Federal government to acquire anything other than a modest percentage of our nation's most important wetlands. Thus, it is necessary that Federal acquisition efforts be complemented by other public and private acquisition programs as well as regulatory and conservation incentive programs.

The Service has been involved in attempting to make certain that public dollars are used wisely when wetlands are acquired. This year, as directed by the 1986 Emergency Wetlands Resources Act, we completed the National Wetlands Priority Conservation Plan, which provides general direction and guidance from the national level that can be used to identify wetlands that should have priority for acquisition.

Other Activities

Wetland Delineation -- The Service, Corps of Engineers (Corps), Environmental Protection Agency (EPA), and the Soil Conservation Service (SCS) all define wetlands based on the same three basic elements: hydrology, vegetation, and soils. Under normal circumstances, the Corps, EPA, and SCS wetlands definitions include only areas that are vegetated, while the Service's definition encompasses both vegetated and nonvegetated areas.

Last year, we began working with the Corps, EPA, and SCS to develop a way to consistently identify vegetated wetlands for jurisdictional determinations. On January 10, 1989, the Service, EPA, Corps, and SCS signed a joint "Federal Manual for Identifying and Delineating Jurisdictional Wetlands." This manual reconciles interagency differences regarding vegetated wetlands and will lead to more uniform, consistent and rapid wetland delineation determinations.

Educational Programs -- The Service believes that educational programs will be essential if our goal is to eliminate net losses of wetlands resources. We already have several programs that emphasize public education about wetland values. For example: twenty-three state-run locations across the country distribute maps developed by the National Wetlands Inventory; the Service has cooperated with the Environmental Protection Agency to develop brochures and pamphlets that inform the public about wetland values; wetland slides are shown at the visitor centers of our refuges; and a video developed through the Service's Farm Bill program, which informs farmers about wetland values, has been adapted for media use. The Service plans to continue its efforts to educate the public about the values of our Nation's wetlands resources.

International Treaties -- The Service has primary responsibility for implementing a number of international treaties and conventions dealing with conservation of migratory birds. The Service is the lead agency representing the U.S. under the Convention on Wetlands of International Importance (RAMSAR) and has nominated seven sites for designation as wetlands of international importance.

Research Activities -- The Service maintains a National Wetlands Research Center in Slidell, Louisiana, to study and report on wetlands. Wetlands or wetland-related research also occurs at the Service's research facilities located in Northern Prairie, North Dakota; Fort Collins, Colorado; and Patuxent, Maryland. Research

covers a broad range of wetland issues, including Louisiana coastal wetland loss studies, development of restoration methods, geographic information system development, waterfowl research, and coastal barrier island assessment.

Coastal Barrier Resources System -- The Department of the Interior transmitted its Report to Congress on the Coastal Barrier Resources System (System) during January 1989. This report is based on a statutory requirement contained in section 10 of the Coastal Barrier Resources Act (CBRA). In addition, the Department is finalizing maps which identify undeveloped coastal barrier areas along the shoreline of the Great Lakes states which would qualify for inclusion in the System. In adopting CBRA, Congress defined three major objectives, including the goal of minimizing the damage to fish, wildlife, and other natural resource along the Atlantic and Gulf coastlines.

As my testimony indicates, virtually every aspect of the Service's work touches upon wetlands. Within our agency, a broad array of programs carries out wetland protection, management, restoration, and enhancement.

The "NO NET LOSS" CONCEPT

I would now like to make a few observations on the concept of "no net loss" of wetlands. The Service has considerable experience with respect to this goal -- mitigation for unavoidable wetland

losses. Certainly "no net loss" embodies the fundamental concepts of avoiding wetland destruction whenever possible, minimizing damage when wetland disturbance is necessary, and replacing functions and values that are lost. How this will be accomplished, where this will be accomplished, who will be responsible, and who will be the accountant for this balancing system are questions worthy of considerable attention.

In 1981, the Service published in the Federal Register a Mitigation Policy that has proved to be a very effective tool for promoting consistency in Service recommendations regarding fish and wildlife resources. The need for consistent and predictable mitigation has been identified in the Conservation Foundation's Report as a critically needed tool. The Service policy recognizes that all wetlands are not equal. Some are unique and irreplaceable habitats and are worthy of preservation. Others are important enough, by virtue of their functions and values, that replacement should comprise the same type of habitat in the same general location. Still other habitats may have relatively lower functions and values, and minimizing losses may be appropriate. The Service mitigation policy is premised on sound scientific analysis of fish and wildlife values.

Obviously, to achieve a comprehensive "no net loss" goal, we must consider many functions and values of wetlands beyond their fish and wildlife value. In many cases, the hydrological functions of wetlands in terms of flood water storage, ground water recharge,

and maintenance of soil moisture may be the more valuable wetland functions to society.

Another concern regarding "no net loss" deals with whether the account is measured in wetland acreage or wetland functions. There are merits to either approach and to both approaches in combination. Clearly, it is the functional aspect that imparts value to wetland habitats. On the other hand, our imperfect understanding of wetland functions often makes dealing in acreage an easier, if less precise, approach. The ability to precisely quantify wetland functions would greatly assist in developing a "no net loss" approach. At present there is no universally accepted method to quantify all wetland functions.

A recurring consideration in defining "no net loss" is its applicability to all circumstances. There may be situations where flexibility is advisable because replacement opportunities are limited geographically, biologically, or technically. As in all complex natural resource issues, innovation and reasonableness will be required.

CONSERVATION STRATEGIES

Mr. Chairman, your invitational letter also requested that we discuss measures to end the destruction of our nation's wetland resources. Several recent reports referenced earlier in this testimony have provided a thorough analysis of some of the deficiencies in the current wetland protection mechanisms. The

Administration will develop recommendations to improve this system through the inter-agency wetland task force. Let me make just a few observations this afternoon on how wetland conservation sometimes falls through the cracks.

It has been widely reported that the Clean Water Act does not effectively regulate 80 percent of wetland losses which are primarily due to agricultural activities. The report by the General Accounting Office regarding the section 404 program which was published last Fall described many of the reasons that the 404 program is not adequately protecting wetlands. Similarly, much controversy surrounds the wetland conservation provision of the Food Security Act known as "Swampbuster". Some believe that it is overly restrictive on farmers, and some believe that it provides only limited wetland conservation benefits.

In fact, section 404 regulates only discharge of dredged or fill material, one of many actions that destroys wetlands. "Swampbuster" addresses any type of conversion of a wetland, but only if that area is subsequently used to produce an agricultural commodity. Many agricultural activities, therefore, are specifically exempt from section 404, and "Swampbuster" is a deterrent only for farmers participating in government subsidy programs.

As we consider the ledger of annual wetland losses and gains that challenges us today, it is clear we all have a lot of work to do to help achieve the President's goal. Based on our experience in

wetland trends, wetland m: ation, and wetland restoration, the Service is confident that attainment of "no net loss" of wetlands is a realistic and desirable goal, and we are eager to pursue it.

Mr. Chairman, I appreciate the opportunity to address the Subcommittee on this important issue, and I will be pleased to answer any questions you may have.

Statement of John Campbell
Deputy Under Secretary for International Affairs and Commodity Programs
U.S. Department of Agriculture
before the
Subcommittee on Fisheries and Wildlife Conservation and the Environment
Committee on Merchant Marine and Fisheries
House of Representatives
May 17, 1989

Thank you, Mr. Chairman, for the opportunity to discuss measures to improve and enhance our Nation's wetland resources. In the letter inviting the Department of Agriculture (USDA) to participate in this hearing, we were asked to identify the Department's programs that affect wetlands and to discuss the strengths and weaknesses of these programs.

USDA's wetland programs can be divided into two groups: (1) public land management, principally involving the National Forest System; and (2) assistance to non-Federal landowners and users, including private individuals and units of State and local government. I will focus on the second group of programs, especially as they relate to private landowners and users.

The programs that I will discuss have three important strengths. First, most are voluntary programs. Second, our programs are delivered at the local level and have the benefit of input from State and local units of government and advisory boards. Third, development and administration of these programs often involve the cooperative efforts of the Departments of Agriculture and Interior, the Environmental Protection Agency, and the Corps of Engineers. For example, in January of this year, these agencies worked together to establish uniform procedures for identifying and classifying Federal wetlands through adoption of a Federal Manual Identifying and Delineating Jurisdictional Wetlands.

We are in the process of developing a number of policy alternatives to meet the President's goal of no net loss of wetlands over time. It is our intention to develop these alternatives in the framework of an inter-agency wetlands task force, which will be in place in the near future.

Estimates of historical wetland acreage in the United States range from 127 million acres (1980 Resource Conservation Act) to 215 million acres (U.S. Fish and Wildlife Service), compared with the best current estimate of 99 million acres of remaining wetlands. According to the National Wetlands Status and Trends Report, 87 percent of the 13.8 million acres of wetlands lost between the mid-1950's and mid-1970's were converted to agricultural uses.

Historically, part of this conversion was carried out with Federal assistance from USDA, the Department of the Interior, and the Corps of Engineers. However, a series of laws, congressional decisions, and executive orders approved in the 1970's have led to development of some USDA programs that provide assistance to landowners to preserve wetlands and others that constrain assistance and limit wetland losses.

One of our oldest assistance programs is the Water Bank Program, which began in 1972. Under the Water Bank Program, wetland owners agree to protect and maintain wetland areas and establish permanent cover on adjacent land for a 10-year period in exchange for annual rental payments and cost-share assistance to establish the cover. By maintaining these wetlands and adjacent lands in a natural state, the Water Bank Program greatly enhances wildlife nesting, feeding, and breeding habitat.

Water Bank Program is offered in ten States that have major migratory waterfowl flyways and are identified as high priority areas in the U.S. Department of the Interior's North American Waterfowl Management Plan. Conservation plans are implemented on all Water Bank Program acres and require contract holders to preserve the area's wetland state and provide habitat on surrounding lands. If needed, cost-share payments are made available for installing conservation practices.

As of March 1989, there were 4,366 agreements in effect covering 493,000 acres, 171,000 of which are wetland acres, and the remainder of which are adjacent lands. At approximately $18 per acre, program expenditures for Fiscal Year 1989 are estimated at $9 million.

One drawback with the Water Bank Program is the lack of permanency. Although many holders of expiring contracts are offered new 10-year contracts, the program is forced to compete with alternative land uses and needs consistent Federal funding.

The Administration is currently working on proposed legislation that would seek to replace the 10-year contract feature with a permanent conservation easement. The proposed Water Bank Program legislation would provide the Secretary of Agriculture with the authority to acquire permanent easements for the protection of wetlands. The use of permanent easements would eliminate the loss of wetland protection that currently occurs when Water Bank Program contract holders decide not to renew their agreements or insufficient funds are available to renew all expiring contracts.

Under the easement provisions, cropping or any other activity that would alter the wetland values of the area would not be allowed. Harvesting or timber, haying, or grazing would be permitted when carried out in accordance with an approved management plan that would be developed in consultation with the U.S. Department of the Interior's Fish and Wildlife Service. A request was made for $12,371,000 in the FY 1990 budget to provide funds for Water Bank Program easements. This would be an increase of $3,371,000 over the FY 1989 appropriation.

Another important wetland conservation assistance effort is the Conservation Reserve Program (CRP), which is authorized by the Food Security Act of 1985 (1985 Act). Recent expansion of the acreage eligibility criteria for the Conservation Reserve Program makes approximately 5 million acres of cropped wetlands eligible for the program. The Conservation Reserve Program is primarily designed to retire 40 to 45 million acres of highly erodible cropland.

In a manner similar to the Water Bank Program, some adjacent land is also eligible to be enrolled with the wetland. Unlike the Water Bank Program, however, wetland areas must have a cropping history to be eligible for the Conservation Reserve Program. Because of this requirement, generally only wetlands that are seasonally flooded and void of woody vegetation are likely to be eligible for the program. To improve the wetland areas, tree planting is generally required on all suitable wetland acreage enrolled into the Conservation Reserve Program, for which cost-sharing is made available.

Cropped wetlands first became eligible for enrollment in the Conservation Reserve Program during the eighth signup, held February 6-24, 1989. It is believed that bids were submitted for 200,000 to 300,000 acres of cropped wetlands to be enrolled in the program during that period. Many of these bids were submitted by individuals from the prairie pothole regions in the Dakotas and the lower Mississippi River Valley. This and future signups may result in contracts being entered into which would permit a significant amount of cropped wetlands to be enrolled in the Conservation Reserve Program for a 10-year period. The lack of permanency is also a problem with Conservation Reserve Program wetlands, but USDA is trying to offset this situation by strongly encouraging tree planting.

Another, though minor, effort is the construction and restoration of wetlands carried out under the Conservation Reserve Program practice for establishment of shallow water areas for wildlife on highly erodible land enrolled in the program. As of the seventh signup, cost-share assistance had been made available for 2,570 acres of Conservation Reserve Program land in order to establish this practice. This amount will likely increase to 3,600 acres when the Conservation Reserve Program reaches its 40-million acre goal.

In addition to our programs aimed at fostering wetland preservation, we also administer laws aimed at penalizing wetland drainage. The most important legislative initiative of this type for wetland preservation is the Wetland Conservation provision found in the 1985 Act.

Popularly known as swampbuster, this provision denies certain USDA farm program benefits to farmers who produce agricultural commodities on converted wetlands. Wetlands on which conversion activity began before the Food Security Act of 1985 was signed into law in December 1985, are exempt from the provision. The wetland definitions used for swampbuster include the same hydric soil rules used for Conservation Reserve Program cropped wetland eligibility. As of March 1989, roughly 425 producers had been denied USDA annual program benefits because of swampbuster violations. We believe that producers are "getting the message" that USDA intends to implement swampbuster effectively but fairly.

In order to more efficiently administer the swampbuster provisions, the Soil Conservation Service will complete wetland determinations for all cropland and adjacent areas that are participating in USDA programs. To date, Soil Conservation Service technical assistance for wetland determinations has been limited in most cases to those USDA program participants that have voluntarily indicated an intent to alter wetlands at the time of program enrollment. Participants that do not voluntarily indicate an intent to alter wetlands are allowed to enroll for program benefits without having an immediate wetland determination. These program requests are held until time is available to make the determination. As of April 1, 1989, 430,000 wetland determinations have been completed on 4.9 million acres of wetland.

The Soil Conservation Service has also begun a wetland inventory effort in 39 States that have extensive areas of very important wetlands. Approximately $6 million will be used in FY 1989 to cover the additional costs associated with this inventory effort, which is in addition to the $5.5 million allocated for making wetland determinations. Current plans call for the inventory and determinations to be completed by December 31, 1991.

However useful these conservation tools may be, we must recognize that so long as we provide income support through commodity price support programs, there will be a tremendous stimulus for farmers to produce. Generating huge surpluses not only costs taxpayers large sums of money, but it may have adverse environmental consequences as well--in levels of soil erosion and in ground water quality, and in destruction of our vitally important wetlands. If we are to have an environmentally sustainable agricultural production system over the long pull, we must find ways to diminish gradually the nexus between income supports and production levels.

In the Department's emerging response to the no-net loss of wetlands policy, we are taking a positive posture toward wetland protection in our programs. USDA has a set of programs which can help in wetlands conservation. The key to their success is demonstrating the beneficial values of wetlands to landowners who have the ultimate decision-making authority over their land, and assisting them in realizing the potential benefits of wetland conservation.

As Secretary Yeutter said in his April 19 testimony before the Senate Agriculture Committee, "I will expect the Department of Agriculture to be sensitive to environmental and other inter-generational concerns during my tenure, and to balance those interests carefully and sensibly. We'll do that with or without a legislative mandate because it is the right thing to do."

This concludes my testimony, Mr. Chairman, and I will be happy to respond to any questions.

STATEMENT OF

WILLIAM H. HOOKE
EXECUTIVE DIRECTOR, OFFICE OF THE CHIEF SCIENTIST
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

BEFORE THE

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT
COMMITTEE ON MERCHANT MARINE AND FISHERIES
U.S. HOUSE OF REPRESENTATIVES

MAY 17, 1989

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to appear before you today to discuss wetland programs of the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, and the recommendations of the National Wetlands Policy Forum.

I would like to take the opportunity today to congratulate the National Wetlands Policy Forum on a job well done and to add that NOAA has been pleased to participate in the Forum as an ex-officio member. We are continuing to assist the Forum Implementation Committee and have begun NOAA-wide review of our wetland activities to determine the extent to which we are addressing concerns raised by the Forum's consensus process.

NOAA is looking forward to participating on the Domestic Policy Council's task force on wetlands. The President stated that he is committed to the preservation of the Nation's remaining wetlands and to adopt a national goal of "no net loss of

wetlands." To accomplish this goal, the Federal Government needs to coordinate wetlands policy where agencies work in concert. President Bush has stated that strengthening existing Federal programs and regulations is required to protect, maintain, and restore wetlands. The Nation must look beyond Federal programs and regulations to encourage wetlands protection.

In the near future, the President will establish an inter-agency wetlands task force under the Domestic Policy Council to work towards no net loss of wetlands as a national goal.

The wetlands inter-agency task force should play a major role in developing and implementing programs that encourage wetlands protection and recovery. The task force should also play a major role in public education that fosters a better understanding of the value of wetlands as a national resource. Until the task force has been established and begins its work, the Administration will not be in a position to comment on or support the specific wetlands recommendations made by the Conservation Foundation's National Wetlands Policy Forum.

As the steward of the Nation's living marine resources, NOAA's National Marine Fisheries Service (NMFS) is responsible for habitat conservation, the management of living marine resources in the U.S. Exclusive Economic Zone, and the protection of certain marine mammals and endangered species. Our habitat conservation responsibilities encompass coastal areas and estuaries, and upstream as far as necessary to protect anadromous

species' spawning grounds and impacts reflected upon coastal habitats. In carrying out this responsibility, our efforts are directed at protecting and conserving coastal, estuarine, and riverine wetland areas of the United States.

Estuarine and coastal wetlands provide habitat essential for the maintenance and productivity of the Nation's living marine resources. Approximately 70 percent of commercially and recreationally important fish and shellfish species in the United States spend a critical part of their life in estuarine and nearshore areas. These species, referred to as "estuarine-dependent", include salmon, menhaden, herring, flounder, shrimp, crabs, oysters, and clams. Many inland and riverine wetlands also support anadromous species, such as salmon, striped bass, and sturgeon.

Conservation of these habitats, therefore, is a primary goal of NMFS' Habitat Conservation Program. Habitat conservation activities are carried out nationwide as a part of the overall fisheries research and management program, and are guided by NMFS' Habitat Conservation Policy, which was published in the Federal Register in 1983. The goal of this Policy is to maintain or enhance the capability of the environment to support living marine resources under NMFS' purview. This goal is consistent with President Bush's stated goal of "no net loss" of wetland habitat. In fact, our habitat conservation efforts are not limited to only "wetland" habitats, but encompass all habitats

important to living marine resources. Such habitats include, among others, mud flats, mangroves, salt marshes, and tidal algal beds.

NOAA's current goal in analyzing activities that may affect wetlands is to maintain current wetlands, or, as a last resort, replace lost wetlands with those which are ecologically equivalent. We believe this goal is best achieved by avoidance of impacts. If impacts are determined to be unavoidable, efforts should be made to minimize the impacts, restore the affected habitat, reduce the impact over time, or, as a final option, replace the habitat. We believe it should be emphasized that replacement of lost habitat with habitat less capable of supporting the desired marine resources, will still result in a loss of habitat. This position has not been adopted by the Administration and will be taken up by the inter-agency task force review.

NMFS' Habitat Conservation Program has a cadre of world-recognized scientists who are developing the technical basis necessary to establish criteria defining acceptable replacement habitat. Our research activities in the areas of ecological value of various habitat types to fishery resources and habitat restoration and creation include studies of recruitment of larvae into estuaries; utilization of wetland habitat types by fishery

organisms; uses of detrital material; evaluation of impacts of freshwater inflow; and synthesis of information on wetland acreage and fishery species life histories.

In 1985, the Corps of Engineers and NOAA signed a Memorandum of Agreement initiating a three-year pilot study to look into the feasibility of a cooperative national program between NOAA and the Corps to restore and create fisheries habitats. The Agreement combined our technical fisheries expertise with the Corps' water resource planning, engineering, and construction expertise and capability. Work done under this Agreement was conducted in conjunction with ongoing Corps projects and involved experimental modifications of project design in an effort to enhance habitat and thereby increase the production and abundance of important coastal species. The pilot study was completed on October 25, 1988. Final recommendations are expected in the near future.

We fully support EPA's earlier testimony that the Federal resource and regulatory agencies must work together to address the complex issues inherent in implementing President Bush's "no net loss" goal. NOAA looks forward to participating in the inter-agency task force on wetlands; revising the Executive Order on wetlands; establishing "no net loss" as a national goal; and coordinating and assessing implementation of the "no net loss" goal.

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Under provisions of the Fish and Wildlife Coordination Act (FWCA), NOAA consults with the Federal water resource construction and regulatory agencies and provides technical and scientific advice to protect, manage, and conserve habitats of living marine resources which may be altered by proposed activities. Since the formation of NOAA in 1970, NMFS has provided analyses and recommendations on approximately 150,000 Federal projects or Federally-authorized permit and license applications. In 1987, NMFS evaluated over 7,300 Corps Section 10 and Section 404 permit applications to dredge, fill, or otherwise alter over 39,000 acres of marine and coastal waters and wetlands. We objected to the alteration of 15,500 acres and for those projects, recommended habitat restoration or generation of an additional 8,400 acres of wetland. NMFS did not object to alteration of 23,000 acres which were proposed for routine dredging and intermittent impoundment for management purposes.

Other elements of wetlands research within NOAA are conducted by the Office of Oceanic and Atmospheric Research (OAR). OAR is responsible for developing and carrying out research programs that provide the scientific and technological basis for improving NOAA's services and products. OAR conducts research either through its Environmental Research Laboratories or through grants to universities under the National Sea Grant College Program.

The Great Lakes Environmental Research Laboratory is currently conducting a research effort that is related to wetlands. A core

research program at that laboratory is evaluating the potential effects of climate change on the Great Lakes. Models have been run to simulate the rainfall, runoff, and evaporation resulting from three different projected climate scenarios. Model output projects changes in lake levels that could occur with variations in climate. Altered lake levels could directly affect the character and functioning of wetland systems associated with the Great Lakes.

Also within OAR, the NOAA National Sea Grant College Program has directed a wetland program. In FY 1988, Sea Grant wetland-related research totalled approximately $2.3 million (Federal plus matching funds). This included 42 projects conducted in 17 Sea Grant programs. Studies of primary production, nutrient dynamics and trophic dynamics in wetlands accounted for 36 percent of funding. Investigations of habitat dynamics and habitat use accounted for 38 percent of wetland studies, wetland management for 18 percent, and other wetland studies for 8 percent.

Although the management of wetlands is not one of the primary missions of NOAA's National Ocean Service (NOS), this office does provide essential products and services for the successful achievement of this goal in three important areas:

- The accurate monitoring of vertical shoreline motion using precise leveling, very long

baseline interferometry (VLBI), the global positioning system (GPS), and the National Water Level Observation Network to measure shoreline movement, coastal erosion, and subsidence-accretion and uplift;

- Nearshore hydrographic coverage in those areas seaward of the changing shoreline to delineate bottom topography at high resolution for the purpose of understanding the causes of changes in shoreline; and
- Historical data from the extensive and unique coastal mapping files in the form of maps and other displays that show the movement of the U.S. shoreline as a function of time since the early 19th century. Enhancement of this existing program is necessary to provide an increased frequency of observation adequate to understand and forecast short-term trends.

An accurate baseline and points of reference are fundamental to wetlands preservation planning. This program coordinated with the National Water Level Observation Network of the Office of Oceanography and Marine Assessment, will enable planners to assess and accurately define the physical damage and economic impact of severe storms, other natural shoreline processes, and human activities, such as construction and coastal development on shoreline erosion and potential destruction of U.S. wetland

areas. The first step in gaining the understanding needed for an effective control program in wetlands preservation is to establish an accurate baseline and points of reference.

Similarly, the development of a global absolute sea level network, initiated in 1987 by a pilot program, jointly funded by NOAA (NOS) and the Department of Energy, will allow accurate predictions of the coastal lands, notably wetlands, which may be lost due to global warming. Specifically, the accumulated time series of absolute sea level data being initiated by NOAA will provide a unique set of data for verifying and calibrating complex coupled models of the ocean and atmosphere required to study the dynamics of the global climate system. The data set provides scientists with the information to distinguish the components of relative sea level variations due to vertical land movement component and the global sea level rise component for the coastal ocean. The network uses VLBI, GPS, and Next Generation Water Level Measurement System (NGWLMS) technology to accomplish this.

In 1985, NOS and NMFS began development of the first comprehensive and consistently derived data base of the areal extent and distribution of coastal wetlands in the coterminous United States (excluding the Great Lakes). These data are being developed using a systematic grid sampling procedure on wetland maps produced by the National Wetlands Inventory (NWI) of the FWS. Grid sampled data are entered into the NOS microcomputer-

based Geographic Information System for processing and manipulation. Digitized estuary or other study area boundaries can be intersected with grid sampled data to produce acreage summaries and color maps for specific units of interest. A series of atlases and reports have been produced including summaries by estuary and also by coastal county for the Northeast (Maine to Connecticut) and the Gulf Coast (Florida to Texas). Products for the Mid-Atlantic (New York to Virginia) and the West Coast (California to Washington) are scheduled to be completed by the end of this fiscal year. The coastal wetlands inventory is one of several habitat elements in NOS's program to develop a national estuarine assessment capability. These habitat elements will be incorporated into NOAA's National Estuarine Inventory program along with other physical hydrologic, biological and economic information to provide a more comprehensive understanding of estuarine environments. Plans call to include updated wetlands data as they become available.

Three other NOAA programs provide significant capabilities to extend NOAA's science and expertise to other Federal, State, and local management and regulatory agencies. The outreach elements of the Estuarine Program Office (EPO), the Office of Ocean and Coastal Resource Management (OCRM), and the multi-line office CoastWatch programs play prominent roles in the Nation's wetlands information network.

The NOAA Estuarine Programs Office has important responsibilities for intra-agency and extra-agency coordination on estuarine and coastal ocean activities. It is the conduit and liaison for information and technology transfer among the NOAA Line Offices, other Federal and State agencies, and research institutions as well as for the public and industry. Under the terms of the Magnuson Fishery Conservation and Management Act Amendments of 1986, P.L. 99-659, the EPO was established to: (1) develop and implement a national strategy; (2) coordinate internal estuarine activities; (3) coordinate external activities with other Federal and State agencies; (4) provide technical assistance to the NOAA Administrator through the dissemination and publication of pertinent technical and scientific information.

NOAA cooperates with the U.S. Environmental Protection Agency (EPA) to solidify support for the National Estuary Program (NEP). This cooperation is through NOAA NEP Regional Representatives who are the official NOAA spokespersons for a designated estuary and serve as liaison among NOAA staff, EPO, and regional coordinators. On-site representatives support the NEP, for the Chesapeake Bay Program (at Annapolis) and the Gulf of Mexico Program (at Bay St. Louis). EPO has played an important role in assisting the Chesapeake Bay Program's development of a Chesapeake Bay Wetlands Policy.

The Coastal Zone Program, which includes the National Coastal Resource Management Framework, provides grants and technical

assistance to States and territories as they respond to increasing demands for the use of their coastal areas. The Program provides assistance to States and territorial governments to prepare and implement programs which balance the use and conservation of coastal and ocean resources. Twenty-nine coastal States and territories covering 94 percent of the coastline now have Federally-approved Coastal Management Programs (CMPs).

The Coastal Zone Management Act declares that "it is national policy to preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation's coastal zone...". The protection of wetlands has been a major element of the 29 approved CMPs.

In addition, the National Estuarine Reserve Research System, authorized under Section 315 of the CZMA, has taken a direct role in protecting and improving the estuarine environment with the establishment of a 17-site State/Federal system of reserves in fifteen states protecting over 300,000 acres of estuarine land and water. Additional reserves are being developed in Delaware, New Hampshire and Virginia. The applied research supported by the reserve program addresses issues of coastal management importance such as the decline of eelgrass and methods for restoration and the effects of road construction and increased urbanization on estuarine resources.

Through its OCRM staff, NOAA is working with the States to see how the "no net loss" policy might be implemented through the

States' CMPs. OCRM has served as a focal point with other relevant Federal resource agencies plans to discuss this policy and its implications with the coastal States.

Taking advantage of NOAA's observing capabilities in the National Marine Fisheries Service, National Weather Service, National Ocean Service, and the National Environmental Satellite, Data, and Information Service, NOAA has developed a prototype predictive program called CoastWatch. NOAA CoastWatch uses focused products and rapid dissemination techniques to supply information to address immediate coastal management needs.

A prototype CoastWatch component is monitoring the losses or gains in coastal wetlands. Quantifying changes in land use and vegetation cover in the coastal zone is critical to linking land-based human activities to the productivity of the coastal ocean. Change in the coastal zone due to human population growth and attendant impacts on the physical habitat, water quality and living marine resources is occurring faster and more pervasively than has been monitored. Similarly, monitoring of land use and vegetational coverage for the coastal zone has not been conducted on time scales appropriate for national and regional decision-making. Therefore, a program is proposed to monitor land use and vegetational coverage in the U.S. coastal zone in order to provide information supportive of research needed to determine the impacts of wetland and estuarine degradation on the abundance

and distribution of fish. Coastal land use and vegetational coverage will be mapped every two to five years and monitored annually in regions of significant change.

Information systems for use on personal computers are also available in prototype form. Easily accessible systems of this type will improve managers' abilities to use pollutant quantity and source information; data on man's multiple uses of the water resources; and physical, chemical, and biological information about an area to make more informed decisions about development and conservation activities.

Understanding the effects of losing or modifying marine habitats as a result of human activities is one of six goals established for Federal programs in the National Marine Pollution Program - Federal Plan for Ocean Pollution Research, Development and Monitoring (FY 1988-1992). This plan was prepared by NOAA in cooperation with the interagency National Ocean Pollution Policy Board as required under the National Ocean Pollution Planning Act (P.L. 95-273, as amended) and was delivered to Congress earlier this year. The Plan recommends the formation of an interagency working group to promote coordination of studies on habitat loss and modification. At the May meeting, discussions will be initiated on improving wetlands mapping, documenting habitat loss rates and patterns, research on habitat functions, and effectiveness of habitat restoration and mitigation practices.

As is apparent from this summary of NOAA wetlands activities, our responsibilities and services provide research and information systems responsive to many of the needs of other Federal and State coastal wetlands managers and regulators as well as the scientific community. Within our current resources, we continue to explore means of augmenting, modifying or complementing our existing programs to produce NOAA products and services that better meet the needs of achieving the President's "no net loss" wetland policy.

Mr. Chairman, that concludes my statement. I will be happy to answer any questions that you or Members of the Subcommittee may have.

DEPARTMENT OF THE ARMY

OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

COMPLETE STATEMENT OF

JOHN S. DOYLE, JR.

BEFORE THE

FISHERIES AND WILDLIFE CONSERVATION

AND THE ENVIRONMENT SUBCOMMITTEE

COMMITTEE ON MERCHANT MARINE AND FISHERIES

MAY 17, 1989

Mr. Chairman and members of the Subcommittee, I am John S. Doyle, Jr., the Principal Deputy Assistant Secretary of the Army (Civil Works). I am pleased to be here this afternoon to discuss the programs of the Army Corps of Engineers that affect wetlands.

As you know, protecting and wisely managing our Nation's remaining wetlands has jumped to the forefront of the Nation's environmental conscience. In this respect, we wholeheartedly support the President's initiative to strengthen existing Federal programs and regulations that protect, maintain, and restore wetlands. We look forward to participating fully in his proposed inter-agency task force for developing and implementing that initiative.

We at Army have learned very clearly that wetlands and their associated values are critically important to water quality and provide a vital base for many of our sport and commercial fisheries, wildlife populations, recreational, cultural, and aesthetic amenities. Wetlands also serve a valuable role in storing flood waters, recharging groundwater, and providing other beneficial hydrologic functions. The recognition of the importance of wetlands is not new to the Corps. A list of wetland values and a policy discouraging unnecessary alterations of wetlands first appeared in our regulations in May of 1973. However, permit decisions dating back to the early 1960's reflected a growing concern for wetlands.

Most of us here today feel strongly that something must be done to both minimize and to turn back the clock on wetland losses. Choosing between wetland preservation and allowing a farmer to drain cropland or to allow a community to construct a flood control levee to protect life and property or a water supply reservoir are not easy choices. We fully recognize that implicit in any wetlands goal is the need to strike a proper balance among the many competing interests for the use and protection of these important resources. It is often very difficult to make a choice between wetland preservation and conservation and other essential public interest factors such as property rights, energy, agriculture, transportation, public health and safety, food, fiber and forest products, housing,

recreation, mineral development, communications, flood control, water supply, and navigation. This Administration has signaled a heightened interest in stemming wetland losses, and, I assure you, we will respond to that signal.

PERMIT PROGRAM

Perhaps the single most talked about wetlands program of the Corps of Engineers is its regulatory program. The Corps regulatory program has become a very important factor in the conservation of both our Nation's coastal and interior wetlands. However, most wetlands losses (the Office of Technology Assessment estimated over 80 percent) are occurring through activities not regulated by the 404 program. Wetlands can be destroyed or degraded by draining, clearing, mowing or shading, and these activities are beyond the reach of the 404 program unless they result in the discharge of dredged or fill material. By far, most wetland losses result from clearing and draining.

ANNUAL PROGRAM

The Corps regulatory program under Section 404 of the Clean Water Act is a part of the Corps overall regulatory mission, which also includes authority to regulate all work and structures

in navigable waters of the United States, under Section 10 of the Rivers and Harbors Act of 1899, and the transportation of dredged material for purposes of ocean dumping under Section 103 of the Marine Protection, Research and Sanctuaries Act.

About 30 percent of the permit applications submitted to the Corps each year require authorization only under Section 404, 30 percent involve both Section 10 and Section 404, 40 percent involve only Section 10, and less than 1 percent involve Section 103. The Corps evaluates approximately 15,000 individual permit applications per year, issuing or denying about 11,000 permits. The remaining 4,000 applications are either cancelled by the Corps, withdrawn by the applicant, or qualify for a general permit. The Corps also has a growing backlog of pending applications. The number of applications has greatly increased during the last two years as workload exceeds available resources.

The Corps regulatory program also includes authority for enforcement. The Corps investigates some 6,000 reported violations annually and inspects permitted activities for compliance with the terms and conditions of issued permits. In January of this year, the Army and the Environmental Protection Agency (EPA) entered into a Memorandum of Agreement (MOA) that will insure that the Corps' limited enforcement resources are used more prudently. The agreement provides a clearer definition

of each agency's enforcement role, thus preventing needless duplication or wasted effort.

In addition the Corps makes about 25,000 jurisdictional determinations each year. Those determinations are usually in response to citizens seeking to know if permits are required for their proposed projects. Jurisdictional determinations are made in accordance with a recently revised MOA with EPA, which was also signed this January. This MOA establishes the Corps as the agency which will perform the majority of wetlands determinations and requires that the actual wetlands boundaries are delineated using the Joint Federal Wetlands Delineation Manual which was signed just prior to the Jurisdictional MOA and for the first time establish a single methodology between the Army, EPA, the Soil Conservation Service (SCS) and the Fish and Wildlife Service (FWS). Both of these jurisdictional agreements culminate many years of diligent effort by the participating Federal agencies and will go a long way toward ensuring consistency and effective implementation of our respective programs.

In addition to the three important agreements just mentioned, I believe that the Army and EPA will soon reach agreement on a joint mitigation policy under the Section 404(b) (1) guidelines. This agreement along with the other three agreements will give us a solid framework to improve administration of the 404 program.

Since enactment of Section 404 of the Federal Water Pollution Control Act Amendments of 1972, the Corps regulatory program has been the focus of much attention because of its ability to afford protection to wetlands. The Section 404 regulatory program has been an evolving, dynamic program that has been shaped by judicial decisions, subsequent legislation, national policy, and local or regional concerns that at times may be both site and project specific.

Section 404 is broad in terms of waters regulated; it applies to literally all natural or artificially created waterbodies including wetlands. Conversely, the scope of activities regulated under Section 404 is narrow; only projects that involve the discharge of dredged or fill material into regulated waters are subject to Section 404. This jurisdictional juxtaposition is particularly important in understanding the limited capacity of Section 404 to control impacts on wetlands.

The regulatory program is labor intensive because permit decisions and enforcement cannot be "contracted out" to the private sector. In addition, as the program has matured, the laws, judicial decisions, and procedures that affect regulatory decisions have increased in both number and complexity. This makes it essential to develop and pursue policies that will reduce duplication and unnecessary paperwork. We are continuing

to strive to improve the efficiency of the Corps permit decision process. Delay is the number one criticism leveled against the regulatory program. While applicants are not always due a favorable decision from their government, we believe that they are entitled to a decision that is both fair and timely.

PERMIT PROCEDURES

The Corps authorizes activities through both individual and general permits. Applications for individual permits require considerable evaluation and at times are subject to a lengthy and complex process. General permits are issued for minor activities and require a less rigorous administrative test for each individual project. Enforcement is accomplished through an administrative or legal process. What follows is a more detailed discussion of each of these program areas.

In general terms, permit applications that are broader in scope, or that affect more sensitive waterbodies such as wetlands require an individual permit. This means that the application is subject to an intensive and comprehensive public interest analysis and evaluation. That process includes issuance of a public notice which requests comments and offers an opportunity to request a public hearing. An environmental assessment or in some cases an environmental impact statement is prepared in

accordance with the requirements of the National Environmental Policy Act. If the proposed project involves a discharge of dredged or fill material, the State must either issue or waive a water quality certificate under Section 401 of the Clean Water Act. Also, should the project be proposed within a State's coastal zone, it must be consistent with any approved State Coastal Zone Management Plan.

An individual permit will be issued to authorize a proposed project unless the evaluation process determines that the project would be contrary to the public interest; that is, the perceived benefits fail to exceed the foreseeable detriments. In which case the permit would be denied. A permit will also be denied if the project fails to comply with guidelines established by the EPA in conjunction with the Corps pursuant to Section 404(b)(1) of the Clean Water Act. The failure to meet the 404(b)(1) guidelines would be based on a determination that the proposed action is not the least environmentally damaging practicable alternative, or would result in the unacceptable degradation of an important aquatic resource, or would not comply with State water quality standards.

General permits may be used to authorize activities whose impacts, either individually or cumulatively, are minor in nature. General permits are frequently used to regulate activities in waters which are less environmentally sensitive or

where the potential impacts to interstate commerce are less direct. A number of minor activities such as bank stabilization projects and utility line crossings have been identified and authorized by the Chief of Engineers through the issuance of nationwide general permits. To ensure that nationwide permits do not pose an unforeseen threat to important aquatic resources, the regulations grant Division Engineers discretionary authority to override nationwide permits for particular projects or geographic areas, and to require individual permits.

ENFORCEMENT PROCEDURES

Enforcement actions are taken in response to work done without a permit and work done in non-compliance with the terms and conditions of a permit. Filling activities which have been completed without a Corps permit are usually resolved through either voluntary restoration, or after-the-fact permitting, and when needed through administrative penalties or court imposed civil or criminal penalties. After-the-fact permits are considered only after all other appropriate enforcement responses have been completed.

As stated previously, enforcement is divided between the Corps and EPA under the terms of an MOA. In cases where the Corps is the lead agency for enforcement, it will stop any

ongoing work using a cease and desist order and then decide whether to pursue interim protective measures, administrative penalties, or action through the U.S. Attorney. After-the-fact permitting is only used to remedy the violation in about 25 per cent of the cases. And then, only after being evaluated using the procedure for individual permits.

With respect to Section 404, the Water Quality Act of 1987 provided EPA an independent authority to issue an administrative civil penalty for unauthorized discharges. The enforcement MOA also recognizes this new authority as a first consideration before taking other enforcement actions.

Non-compliance with Corps permits is usually resolved by either achieving voluntary compliance or, when the non-compliance was inadvertent and of minor consequences, by modification of the permit through an evaluation process. The Water Quality Act of 1987 also provided the Corps with new authority to issue administrative civil penalties for non-compliance with Section 404 permits. Our proposed rule which outlines our action plan for this new authority was published in the Federal Register on May 12, 1989.

Water Resources Development Projects

Construction and maintenance of Corps water resources projects also involve important wetland considerations. Each of these projects is planned, designed, constructed, and managed in accordance with the project purposes authorized by the Congress. Congressional authorizations are normally based upon Corps planning studies which are performed pursuant to Congressional study authorizations. Other smaller projects may be built under delegated authorities which allow the Corps to pursue individual projects without specific project authorization. However, the construction of these projects must comply with 404(b)(1) Guidelines and other environmental policies and laws applied to projects which are specifically authorized by Congress.

Wetland resources and other environmental concerns are addressed in both the planning and construction phases of our projects. Wetland considerations are not new to the Corps, since by its nature, the Water Resources program requires work in and around the Nation's waters. Its activities can result in both direct and incidental changes in an area's wetlands. These changes can be either beneficial or detrimental to wetlands values. Historically, many Corps projects have had adverse impacts on wetlands in the interest of achieving other goods and services valued by our society. These include flood damage reduction, navigation, water supply, hydroelectric power, and

recreation. Our policy has been, and continues to be, to consider the many, and often changing, local, regional, and national values and priorities during the planning, design, and construction of water resources projects to formulate the best possible projects for the limited Federal dollars. Of course, times and priorities change, and even though we cannot turn back the clock on our completed projects we can consider operational management strategies to accommodate changing priorities and values toward wetlands.

Project Planning

Corps of Engineers project planning as well as that of other Federal water resources development agencies, is guided by the Principles and Guidelines established pursuant to the Water Resources Planning Act of 1965 (P.L. 89-80). The Principles and Guidelines, commonly referred to as the P&G, specify that the Federal objective of water and related land resources planning is "to contribute to national economic development consistent with protecting the Nation's environment, pursuant to national environmental statutes, and applicable executive orders and other Federal planning requirements."

The planning process under the P&G requires consideration of the full range of alternative plans, and mitigation of the adverse environmental effects attributed to each alternative plan is integral to the planning process.

The Corps planning process leading to the authorization of a Federal project is conducted in two phases. The first phase is a full Federally funded reconnaissance study. This is followed, if appropriate, with a cost-shared feasibility study.

From an environmental point of view, our goal during the reconnaissance study phase is to identify environmental problems and opportunities that would be appropriate for including in the feasibility study, and to identify wetlands or other environmentally sensitive areas that would likely be affected by any of the plans being considered.

We also attempt to identify any potential adverse impacts that could require mitigation and the likely array of potential mitigation measures that appear appropriate for further investigations during the cost-shared feasibility study phase of planning.

Unlike the reconnaissance stage of planning, the feasibility stage requires field surveys and well-defined studies and considerable analysis. It also requires formal coordination and

consultation with Federal and State agencies in compliance with the National Environmental Policy Act (NEPA), the Fish and Wildlife Coordination Act and other applicable statutes.

Required environmental studies during the Feasibility Study are designed to provide engineering, economic, environmental and other information needed for decision-making about alternative plans in light of the competing social values affected by the alternative plans. The goal of the feasibility study is to identify the most cost-beneficial response to an identified water resources problem or development opportunity that also is compatible with environmental values and acceptable to the project sponsor and the Federal Government. The goal is to assure that environmental concerns, including the preservation and protection of wetlands, are thoroughly integrated into the planning process and that water resources development plans are recommended upon full consideration of these concerns.

Mitigation

Whenever a plan identifies adverse environmental impacts that cannot otherwise be avoided, mitigation becomes an important element of a complete plan since protecting the Nation's environment, which includes wetlands, is inherent in the Federal objective under P&G. The cost of mitigation is factored into the

economic analysis for the overall project; therefore, beyond our interest to protect wetlands for their environmental and social values, there also is a strong economic incentive to avoid and minimize adverse impacts to wetland resources.

Section 906(d) of the Water Resources Development Act of 1986 (WRDA 86), requires that reports submitted to Congress in support of authorization contain either:

- a recommendation with a specific plan to mitigate fish and wildlife losses created by such projects; or,
- a determination that such projects will have negligible adverse impacts on Fish and Wildlife.

This section also directs that all losses to bottomland hardwood forests be mitigated in kind. We have fully implemented this provision and have developed specific mitigation plans for 16 projects supported by the Administration since that time.

Louisiana Coastal Wetlands Study

While I have focused thus far on the planning process in general, let me now turn to a specific on-going Planning effort which could yield tremendous benefits for wetlands -- the Louisiana Comprehensive Coastal Wetlands Study. Louisiana contains 40 percent of our coastal wetlands, but is experiencing 80 percent of the coastal wetland loss, some 35-40 square miles per year.

The purpose of the study is to develop a comprehensive plan to address coastal land loss by bringing together the numerous Federal, state and local agency plans and proposals under one umbrella study. The Corps is conducting this study with the cooperation of the U. S. Environmental Protection Agency, the U. S. Fish and Wildlife Service, the U. S. Geological Survey, the U. S. Minerals Management Service, the U. S. National Marine Fisheries Service, the U. S. Soil Conservation Service and the State of Louisiana Departments of Environmental Quality, Natural Resources, Transportation and Development, and Wildlife and Fisheries. The reconnaissance phase is underway, and we expect the reconnaissance report to reach our office this summer. Once the study has determined the most cost effective plan for combating the loss of coastal wetlands, each agency would then use its normal authorization processes to pursue those elements of the plan in their area of responsibility.

Recent Initiatives

Recent changes in the project development process should help assure that environmental values are more fully considered. First we are streamlining this process to reduce the time it takes to plan, design and construct projects. This will help assure that projects reflect current environmental values and

concerns. We also are instituting earlier Washington level involvement in the planning process to assure that all issues are resolved before a recommendation on a project is sent forward. A new system of project management also will provide a single point of contact for environmental concerns and help assure continuity as a project moves from conception to construction. Moreover, it will assure that environmental commitments during the planning phase are recognized and implemented as the projects move into construction.

Effects of Project Cost Sharing

It is fully expected that the policy reforms of WRDA 86 will yield more economically efficient and environmentally sound projects. The results to date look very encouraging. Because non-Federal sponsors must pay a portion of project costs, project designs have been more closely matched to the production of early benefits, projects have been reduced in scale or are being phased in over longer periods of time. The result is not only economic efficiency, but also reduced environmental impacts, including reduced wetland impacts. For this reason, private environmental groups were key supporters of the compromise which yielded WRDA 86 and have continued to support its reforms.

Cost sharing also will result in fewer projects being advanced for authorization as local sponsor willingness to pay will act as a selection constraint. Reduction of the total number of projects authorized for construction should also reduce the cumulative environmental impact caused by all projects that do proceed to construction. WRDA 86 specifically deauthorized some 300 projects, and provided for periodic reporting of others eligible for deauthorization. The first such report identified 363 eligible projects.

The participation of local sponsors in the design process will assure that environmental concerns are fully addressed and carefully evaluated. Because sponsor consent must be achieved before a Local Cooperation Agreement can be achieved, and ultimately a project completed, local environmental perspectives will be afforded the full attention of the Federal partner. Projects, or project features, that are perceived to represent unacceptable environmental risks either will be eliminated from the selection process or modified to reduce the environmental impact to a level that allows for sponsor/community support of the project.

Maintenance of Navigation Projects

In the case of projects operated and maintained by the Federal Government, planning continues after construction. Because continuing maintenance responsibilities for our navigation projects frequently involve wetlands, there is a continuing evolution of the management of dredged material in response to changing values, scientific information, and technology. The Federal navigation system presently includes over 25,000 miles of Congressionally-authorized navigation channels serving 400 major U.S. ports and 41 of the 50 states. Dredging and attendant management of these dredged sediments is a vital requirement in maintaining and improving this system. Due to the critical importance of this Federal navigation system to the nation's economic well-being and national defense, it is most often not a question of whether dredging will occur, but rather one of finding a location to place the dredged sediments that accommodates both economic and environmental considerations.

At present we must dredge approximately 300 million cubic yards (mcy) of sediments annually to maintain the Federal navigation system to necessary water depths. The new work authorized in WRDA 86 and Navy Homeporting will significantly increase the volume during the next 3 to 5 years. Finally, it is estimated that an additional 100-150 mcy of sediments will be dredged each year pursuant to permits issued through the Corps Regulatory Program.

Beneficial Uses of Dredged Material

To date, the Corps, as part of its navigation program, has participated in over 140 separate projects in 27 states involving wetlands protection or restoration using dredged material. The total amount of wetlands benefiting from these projects exceeds 13,000 acres. Some specific examples which illustrate beneficial uses of dredged material are as follows:

Pointe Mouillee, MI

An excellent example of the beneficial use of dredged material is the Pointe Mouillee project in Michigan on the western shore of Lake Erie. This facility was built to serve as a disposal site for dredged material and to protect and restore a 4,600 acre state wildlife management area. It was one of the first large-scale projects to combine the goal of cost effective placement of dredged material with natural resource development and management. It resulted in a return of wetland and upland plant species, increased use by fish and wildlife, and a wide acceptance of the area by local and regional citizens for recreational purposes.

Weaver Bottoms, MN

Weaver Bottoms, a part of the Upper Mississippi River National Wildlife Refuge Complex near Winona, MN, serves as another example of the beneficial uses of dredged material. Weaver Bottoms is a several thousand-acre wetland which is a migratory stopover for swans, geese and ducks using the Mississippi Flyway. It was restored with dredged sediments from the Mississippi River project. At this site eroded portions of the bottoms were plugged and nesting islands were created with dredged material. As a result, erosive action was slowed; sedimentation occurred; and an emergent wetland was reestablished.

Wetlands Creation

The Army Corps of Engineers has many examples throughout the United States where wetlands creation has been applied. One example in the Columbia River in Oregon involved disposal of sandy dredged material to create an intertidal marsh and adjacent sandspit. The disposal area is regularly used as part of required maintenance dredging activities. However, the marsh provides habitat for many commercially important fish species. Another example is in Galveston Bay where an estuarine marsh was created on sandy dredged material from the Gulf Intracoastal

Waterway. This site was subject to high wave energies but was protected by a small wave barrier which allowed free access to the marsh by fish and shellfish. The Corps also used dredged material to create new wetlands along the Mississippi River and other streams such as the Altamaha River in Georgia and the James River in Virginia. Over 3,000 acres of productive marshland have been created by disposing dredged material in shallow open water areas. This replacement of shallow open water habitat results in the conversion of one type of fishery habitat (open water) for another (marsh). Research has indicated that created marshes often are more productive and beneficial to fish and wildlife resources than the converted open water bottom habitats. There are some instances, however, where such conversions are not more beneficial. Research is currently underway to assist in making these decisions. The Corps will continue to be sensitive to the concerns of open water habitat replacement for marsh creation and where deemed most beneficial, wetlands creation will continue.

Upper Mississippi Management Program

The Upper Mississippi River System Environmental Management Program (UMRS-EMP) is a specific regional environmental program that addresses, among other things, wetlands protection, conservation, and restoration, and creation. This program is intended to ensure the coordinated use and the environmentally

sustainable development of the Upper Mississippi River System (UMRS) in concert with the river's many functions and values to the public. The UMRS includes the navigable portions of the upper Mississippi River and Illinois Waterway.

The most pervasive environmental problem on the UMRS is the sedimentation of backwaters and side channels. The formation of the navigation pools in the 1930's created thousands of acres of marsh, wetlands, and lake-like conditions, but the dams also acted as sediment traps. Siltation is causing these valuable natural resource areas to lose some of their habitat value. All of the projects presently in the UMRS-EMP address this problem through dredging, often with the construction of flow control structures, and/or the construction of levees with facilities to control water levels.

Habitat Improvement

Most habitat improvement projects are a combination of three basic types of habitat creation or restoration:

1. Dredging and flow control structures to restore side channel and backwater areas affected by accelerated sedimentation;
2. Levees and facilities to control water levels to provide feeding areas for migrating waterfowl; and

3. Island creation to reduce shoreline erosion and turbidity caused by wind driven waves.

At present, we have two completed habitat projects at Island 42, Minnesota, and at Monkey Chute, Missouri. We have scheduled the completion of three additional projects in FY 1989 at Blackhawk Park, Wisconsin; Guttenberg Waterfowl Ponds, Iowa; and Clarksville Refuge, Missouri. We are scheduled to complete general design on twelve additional projects in 1989. The President's FY 1990 budget request would provide funding to complete a total of six projects and initiate construction on seventeen projects by the end of FY 1990.

The UMRS-EMP is progressing with close coordination among the Upper Mississippi River Basin Association, the five affected states and the Fish and Wildlife Service. We believe that the EMP could be a prototype for future efforts around the Nation.

Freshwater Diversions

There are several other projects affecting wetlands that I would like to describe briefly. The Corps of Engineers and the States of Louisiana and Mississippi are working to restore a small portion of the marsh flooding cycle in a way compatible with flood protection. The Corps of Engineers has studied three freshwater diversion projects to control saltwater intrusion in the Louisiana coastal area.

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Construction of the Caernarvon Diversion Structure, 15 miles south of New Orleans, began last June. It will provide a large volume of fresh water to the Breton Sound marshes. As a result, 16,000 acres of marsh will be preserved over the next 50 years. Construction is scheduled for completion in November 1990.

The Corps is engaged in ongoing study efforts for two similar proposed projects. The Davis Pond Diversion Structure on the west bank of the Mississippi River and the Bonnet Carre' Diversion Structure on the east bank, both a little north of New Orleans, would preserve 83,000 acres and 11,000 acres of marsh and wooded wetlands, respectively. Both of these projects are in the preconstruction engineering and design stage.

Wetlands R&D

In addition to its project specific activities, the Corps is conducting a general wetlands research and development program. This program is carried out at the Waterways Experiment Station in Vicksburg, Mississippi. Wetlands related R&D was initiated over fifteen years ago under the Dredged Material Research Program. Demonstration wetlands were constructed and evaluated in a number of locations around the country. This work led to a number of manuals and reports on marsh creation and the effects of marsh disposal of dredged material. During the period of 1978-1982, research was conducted to determine the physical

limits of wetlands, primarily in response to Section 404 of the Clean Water Act.

From 1981 to present, the Corps has been carrying out wetlands studies under the Wetlands Research Program. This program was established to help district offices respond to the Section 404 requirements and to mandates of Executive Order 11990 which addresses the protection of wetlands. Results of the Wetlands Research Program provided the information necessary to develop the Corps Wetlands Evaluation Technique and the its Wetlands Delineation Manual.

Interagency Accomplishments

As briefly mentioned earlier in my testimony, we have recently reached interagency agreements on three important aspects of the Corps regulatory program relative to wetlands.

Wetlands Delineation Manual

The first major success story and the one that set the stage for the other 2 agreements is the development of a joint Federal manual for identifying and delineating wetlands. Four federal agencies are primarily involved in delineating wetlands: the

Army Corps of Engineers for its regulatory, civil works construction, operation, and maintenance programs; EPA for its regulatory programs; the Soil Conservation Service for its Swampbuster program, and the USFWS for its inventory and acquisition programs. After more than a decade of independent use of different methods for delineating wetlands, the four agencies first convened in the summer of 1988 with an objective to establish a common method for determining the geographical extent of Section 404 wetlands and, if possible, establish a method that all four agencies could adopt for all programs.

On January 10 of this year the four agencies reached agreement and adopted a joint manual that they will use to identify jurisdictional wetlands for their programs. The Army and the EPA began using the new manual in the 404 program on March 20, 1989. This manual is the product of many years of practical experience in wetland identification and delineation by the four Federal agencies and represents a major step forward in protecting and managing the Nation's wetlands. I believe that this is a major breakthrough.

The agencies now are developing training and certification programs on use of the manual. We expect many states will also adopt the manual which will enhance the interaction between state and federal wetland programs. As consultants and other agency personnel become certified in use of the manual, we also

anticipate some relief from the heavy workload pressures now on the Corps to make jurisdictional determinations.

404 Jurisdictional Boundaries

The second agreement was signed with EPA on January 19, 1989, which established an MOA on the determination of geographic jurisdiction and Section 404 (f) exemptions of the Section 404 program. The MOA provides that the Corps will make all the day-to-day jurisdictional and exemption determinations based on EPA guidance and oversight unless EPA designates in advance a special case where it will make the determination.

This new MOA addresses many of the difficulties experienced under the previous agreement that expired several years ago. Both agencies and the public will now have a better definition of responsibilities. The new MOA virtually eliminates any overlap and duplication.

Enforcement MOA

A third agreement was also reached with EPA on enforcement. Effective enforcement is essential to any successful regulatory program. Enforcement under Section 404 of

the CWA is divided between the Corps and EPA, with EPA having explicit statutory enforcement authority to deal with unauthorized discharges of dredged or fill material, while the Corps has similar enforcement authority for violations of permit conditions. The Water Quality Act of 1987 gave administrative civil penalty authority to EPA for unpermitted discharges and to the Army for violations of permit conditions.

Following enactment of the 1987 Water Quality Act, the agencies began negotiations on a more effective and efficient method for allocating enforcement responsibilities between the two agencies. We signed an MOA with EPA on January 19, 1989, that took effect March 20, 1989. Besides reducing duplication and overlap, the MOA was designed to establish a framework for a more effective enforcement program.

The enforcement MOA establishes the Corps as the agency primarily responsible for initial investigations of reported violations. Once a violation is confirmed, the MOA sets a procedure for the designation of a lead agency to pursue the enforcement action. That designation is based on the best use of agency resources, expertise, and authorities to pursue the enforcement action to an appropriate conclusion. This MOA will provide for a strong enforcement program, within each agency's existing resource limits, and, like the Jurisdiction MOA, will make the best available use of those limited resources.

Section 404 Mitigation

Besides these three accomplishments, I believe that the Army and EPA will soon reach agreement on a joint mitigation policy under the Section 404 (b)(1) Guidelines. This agreement along with the three just mentioned will give us a solid framework to improve administration of the 404 program.

North American Waterfowl Management Plan

We were proud to execute another agreement in January of this year which will advance the conservation and improvement of wetlands managed by the Corps of Engineers. This agreement between the Department of the Interior and the Department of the Army is in support of the North American Waterfowl Management Plan, a joint effort between the United States and Canada to restore waterfowl habitat on the North American continent. In broad terms, the goals of the plan are to ensure habitat for 62 million breeding ducks and a fall flight of more than 100 million birds, to ensure wintering habitat for 6 million geese and 152,000 swans, and to maintain the current diversity of waterfowl species.

The U.S. Fish and Wildlife Service and the Corps are now working together to conserve wetlands on the more than nine million acres of land and water managed by the Corps. These land and water areas include wetlands in navigation and flood control projects, many of which are important waterfowl habitats. Some projects are in waterfowl nesting and wintering areas. Others are in the flyways and provide resting or feeding areas for migrating waterfowl. Under the agreement, the Corps and the Fish and Wildlife Service will cooperate in identifying additional opportunities for wetland management on both existing as well as new projects.

Fisheries Habitat Creation and Restoration

In a similar vein, the Corps has been working with the National Marine Fisheries Service to improve and enhance coastal fisheries habitat, which often includes wetlands. The Administrator of NOAA and the Assistant Secretary of the Army(Civil Works) signed a cooperative agreement in October 1985 for a pilot study to investigate the practicability of a National program for restoring and creating fisheries habitat. This program also could contribute to our wetlands base.

As part of the study, dredged material disposal areas at 3 locations in North Carolina and Texas were modified to create shallow, sloped intertidal areas to increase the production and abundance of important coastal species. While repairing a jetty in California, boulder clusters were placed parallel to the toe of the jetty to reduce turbulence. The boulders replaced the existing sand bottom with a more productive reef environment that should benefit fisheries. We expect to receive final reports on the effectiveness of these projects in the near future.

National Wetlands Goal

President Bush has stated that it is the Administration's objective to protect and preserve our wetlands and to adopt a national goal of "no net loss of wetlands." The President stated that he is committed to the preservation of the Nation's remaining wetlands and that achieving the national goal of no net loss of wetlands will require strengthening existing Federal programs and regulations that protect, maintain, and restore wetlands. The President believes that a coordinated Federal wetlands policy is needed, and that private and public sectors must be brought together at the State and local levels to find ways to conserve wetlands.

The President's February 9th Budget plan stated that he will establish an inter-agency wetlands task force under the Domestic Policy Council. The task force will work towards no net loss of wetlands as a national goal. The basic theme of the Presidential initiative is to strengthen existing Federal programs and regulations that protect, maintain and restore wetlands.

As a Presidential initiative, the wetlands inter-agency task force should play a major role in developing and implementing programs that encourage wetlands protection and recovery. The task force should also play a major role in public education that fosters a better understanding of the value of wetlands as a national resource. The Administration is in the process of setting up the wetlands task force, which should be officially established in the very near future. Until the task force has been established and begins its work, the Administration will not be in a position to comment on or support the specific wetlands recommendations made by the National Wetlands Policy Forum.

Mr. Chairman, that concludes my statement. I will be happy to answer any questions that you or members of the Subcommittee might have.

Wildlife Management Institute

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Statement of Lonnie L. Williamson
before the
House Subcommittee on Fisheries and Wildlife Conservation
and the Environment
May 17, 1989

Mr. Chairman:

I am Lonnie L. Williamson, vice-president of the Wildlife Management Institute. The Institute, a private nonprofit organization, has been dedicated to improved natural resource management since 1911. We appreciate the opportunity to express our thoughts and recommendations for curbing destructive losses of wetland habitats--unquestionably one of the greatest challenges facing conservationists today.

Agriculture is the leading cause of wetland loss in the U.S. Estimates indicate that agricultural drainage and conversion have consumed more than 11million acres of wetlands since the mid-1950s. While it is true that the vast majority of this loss occurred on private lands, we recognize that the federal government also is responsible, directly or indirectly, for stimulating conversions through its agricultural commodity programs and policies.

In 1985, for the first time ever, a strong conservation dimension was integrated into federal farm support programs in an attempt to correct past abuses and help halt the destructive loss of wetlands and other valuable wildlife habitat. It is most appropriate, at this time, that Congress make full evaluation of USDA's conservation efforts to assess their effectiveness and to examine the need for new approaches to protect and enhance wetland resources on agricultural lands.

Swampbuster was one of the revolutionary changes made by the Farm Act in 1985. Aimed at protecting an estimated 70 million acres of wetlands remaining in private ownership,

swampbuster denies federal farm program benefits to producers who drain wetlands and convert them to agricultural commodity production. USDA has reported that 207 farmers have been penalized a total of $452,585 in violations to date, but questions have been raised as to the accuracy of these figures and whether or not they truly reflect USDA's effectiveness in enforcing this program to protect wetlands.

Chief among these concerns is the fact that swampbuster only denies benefits to those who drain and subsequently plant a specific commodity crop. This loophole becomes even more ominous considering it is a committee of local farmers who is responsible for making subtle determinations of swampbuster violations.

By tying farm programs to wetland preservation, swampbuster has the potential for success where other federal agriculture policies have failed. However, this unique feature also proves to be the Achille's heel of swampbuster.

During times of robust farm economy, participation in federal farm programs, and therefore compliance with swampbuster, is characteristically low. This is especially true in small farms (acreage and income) where federal farm support benefits are proportionately small.

These circumstances call for increased educational efforts to inform all farmers of wetland values as well as new policy developments to achieve consistent wetland protection.

The Conservation Reserve Program (CRP), also a product of the 1985 Farm Act, has been expanded recently to compensate farmers for restoring and enhancing wetlands. The new changes, made during the February 1989 signup, now allow wetlands cropped during dry years and other croplands eroded by flood water to be enrolled in the 10-year program. According to USDA, approximately 200,000 to 300,000 acres of restorable wetlands have been enrolled to date. The majority of these new CRP wetland acreages are located in the prairie pothole states of North and South Dakota, and should be a great boon for that duck-producing region. The remainder comes from the lower Mississippi River valley. Wetland acreages enrolled in the CRP in that region will be planted primarily to bottomland hardwoods.

Additional incentives and program changes are needed if the CRP is to establish a lasting wetlands legacy. Currently, wetland acreages represent less than 1 percent of the 30+ million acre CRP. Bonus payments or other additional incentives are needed to encourage landowners to voluntarily enroll and restore wetlands during the remaining three CRP signups as the program moves towards its 40-45 million acre goal. Equally important is the establishment of conservation easements on CRP lands. Without permanent easements, the CRP offers at best fleeting wetland protection.

Existing wetlands ineligible for CRP because they have no established cropping history may be enrolled in the Water Bank Program. Landowners from 12 states have enrolled nearly 560,000 acres in this 10-year lease effort. Like the CRP, the Institute supports a permanent easement provision for the Water Bank Program to guarantee lasting wetland conservation.

The Farmer's Home Administration (FmHA) was given a rather unique opportunity to protect wetlands under the conservation provisions of the 1985 Farm Act. Section 1318 authorizes FmHA to assist financially troubled farmers by allowing them to cancel a portion of their delinquent debt in exchange for 50-year or longer conservation easements. Section 1314, in conjunction with Executive Orders 11988 and 11990, places an affirmative responsibility on FmHA to establish conservation easements on wetland properties held in FmHA inventory before they are resold, leased or transferred.

Response to FmHA's debt-for-easement program has been disappointing. For nearly 3 years FmHA has stalled implementation of this program. Then, changes were made by Congress in the 1987 Agricultural Credit Act, which allows delinquent borrowers to write-off debt owed to FmHA rather than exchange it for a conservation easement. As a result, FmHA during the last 6 months has forgiven more than $1 billion of debt owed by approximately 5,200 borrowers--an average of $176,126 per person. Another 17,000 requests are still pending. In sharp contrast, FmHA has used conservation easements to help farmers resolve their debt problems in fewer than 350 cases.

FmHA also is not fulfilling its responsibility to use easements for protecting wetlands on inventory lands (lands taken from farmers and held by the agency). The Fish and Wildlife Service

has made more than 1,200 easement recommendations covering 100,000 to 150,000 acres. FmHA has finalized less than 100 of these recommendations.

Another 300,000 to 500,000 acres of wetlands are projected to come into FmHA inventory over the next couple of years. FmHA is considering proposals to change its regulations to make conservation easements on these properties a voluntary decision of the prior owner.

The Institute appreciates the interest that this subcommittee has taken in supporting FmHA conservation easement programs. Potentially at stake is more than a half million acres of wetlands and continued taxpayer support of FmHA programs now experiencing increased losses.

Another underutilized program for protecting, restoring and creating wetlands is the Small Watershed Program (P.L. 566) administered by the Soil Conservation Service (SCS).

The Small Watershed Program is undergoing transition. Traditionally a flood control program, P.L. 566 has been notorious for directly or indirectly increasing agricultural drainage and conversion of wetlands. Today, large, expensive and sometimes destructive projects are giving way, as they should be, to smaller projects utilizing stronger local cooperation and inputs, including cost-sharing.

Unique opportunities exist to use P.L. 566 funds to acquire easements in floodplains, wetlands and riparian areas. These ecosystems serve as natural flood retention areas and easement acquisitions have proven to be more effective than investments made in structural modifications such as channelization. In addition, wetlands have the particular advantage of trapping and using sediments, nutrients and other nonpoint source pollutants.

However, P.L. 566 funding for beneficial wetland projects that serve a variety of public needs has been nearly negligible. SCS must place greater emphasis on wetland and water quality enhancements, as called for by Presidential initiatives, if support for the Small Watershed Program is to broaden beyond its present base of public support.

There are no substantial reasons to continue converting wetlands to agricultural commodity production--actions that claimed 87 percent of the wetlands lost in two recent decades (1950s-1970s). The U.S. Department of Agriculture reports that food and fiber needs well into the

21st century can be provided without sacrificing important aquatic areas. Recent estimates project 100 million acres or more of surplus crop production capacity will exist by 2030. Obviously, there is no need to convert additional wetlands to commodity production.

Although the numerous aforementioned incentive approaches, such as CRP, easements and other procedures, have been and shall continue to be used to maintain important wetlands, losses of wetlands will continue. The problem is that while we as a nation cannot afford to lose more wetlands, we must recognize that taxpayers cannot afford to purchase all those which remain.

Furthermore, existing regulatory procedures can not adequately maintain these unique, important units of the landscape. Consider their weaknesses:

. Under the 404 permit procedure, a wetland can be drained, but not filled; and

. Under swampbuster, a wetland can be drained without loss of agricultural subsidies, if a specified crop is not planted on the drained area.

A better approach obviously is required to maintain wetlands and prevent their losses. The Institute recc mends a three-point system based upon the public trust doctrine of law.

1. Establish the legal presumption that wetlands shall be maintained to perpetuate the broad spectrum of public values and services they yield;
2. Provide an opportunity to rebut that presumption; and
3. Provide an appeal procedure.

This three-point system now is being used to help prevent further losses of valuable wetlands in Massachusetts, a Water Management District in Florida, and for fish habitats in Canada. It warrants authorization and use at the federal level in the U.S., Canada and Mexico, as well as in every state and province to overcome shortcomings in existing approaches to maintain wetlands and to help meet the wetland maintenance objectives in the North American Waterfowl Management Plan and other international, national, state and provincial plans for improving maintenance and management of natural resources.

International Association of Fish and Wildlife Agencies

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STATEMENT OF THE
INTERNATIONAL ASSOCIATON OF FISH AND WILDLIFE AGENCIES
ON WETLAND CONSERVATION
before the
HOUSE SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT

17 May 1989

The International Association of Fish and Wildlife Agencies, founded in 1902, is a quasi-governmental organization of public agencies charged with the protection and management of North America's fish and wildlife resources. The Association's governmental members include the fish and wildlife agencies of the states, provinces, and federal governments of the U.S., Canada, and Mexico. All 50 states are members. The Association has been a key organization in the promotion of the principles of sound resource management and the strengthening of federal, state, and private cooperation in protecting and managing fish and wildlife and their habitats in the public interest.

The Association is pleased to present its views on agriculture related wetland losses. We believe that habitat destruction, especially wetland destruction, is one of the most important issues facing natural resource managers today. We acknowledge the past federal and state efforts in wetland protection. The Federal government, states, the Association, and others have tried many approaches to wetland conservation since the mid-1950's. However, these efforts have not been successful in halting the continued loss of wetlands. The United States has lost over one-half of its wetlands, more than 110 million acres, since the time of European settlement, and we continue to lose an additional 300,000 acres annually. To put this into perspective, this cumulative loss is greater than the land area of California, and is exceeded in area only by two states: Alaska and Texas. Efforts to protect the remaining wetlands will be long, hard fought, and expensive. It will require an improved understanding of the benefits of wetlands, as well as innovative programs that encourage protection, enhancement and use of wetlands as wetlands, rather than conversion to some other use. In our statement, we hope to outline current wetland protection programs, focusing on incentives, finishing with some recommendations to foster wetland protection.

Discussions of wetlands protection must focus primarily on private land management as 74% of wetlands are privately owned. A fundamental problem with wetland protection on private land is that most landowners perceive few benefits, to them, of protecting wetlands on their property. Some actually see wetlands as a liability. Most of the wetland functions discussed, such as groundwater recharge, flood control and wildlife production, are real and important, but these benefits

usually do not accrue to the landowners. To be effective, wetland protection processes and programs must be designed to better relate costs to those that benefit from wetland functions. This means an aggressive combination of education, incentives, or regulations will probably be needed.

There are numerous avenues to help achieve the wetland protection that we are all seeking. Protecting wetlands will take major coordinated efforts by federal and state governments, and the private sector. Incentives, including public education and technical assistance to assist with wetland use, restoration and enhancement, will be a major component of wetland protection strategies, particularly on isolated wetlands such as prairie potholes. Appropriate and workable Federal and state regulations with timely enforcement are other important means of wetland protection.

Some states have undertaken innovative approaches to wetland conservation. Minnesota, under its Reinvest in Minnesota (RIM) Program, identifies wetlands as critical habitats which qualifies these lands for 1:1 state-private matching funds for wetland acquisition. Missouri, through its Department of Conservation, has drafted a statewide wetland management plan (MWMP). The mission of the MWMP is to manage and restore wetland resources in Missouri and provide recreational opportunities compatible with resource objectives. This comprehensive plan includes wetlands acquisition, restoration, and management; public education and information; and needed research. The plan, compatible with the North American Waterfowl Management Plan, addresses the habitat needs of waterfowl, webless migratory birds, wetland mammals, and endangered species.

INCENTIVES

A number of types of incentive programs exist to encourage protection, restoration, and perpetuation of wetlands. These include public education, technical assistance, and the more familiar financial incentives. Public education about the values associated with wetlands and how these values provide benefits to the landowner, as well as the public, is vital to long-term wetland protection. Landowners need to be made aware of wetland values that directly benefit them, such as groundwater recharge, haying and grazing during drought, and hunting and fishing opportunities. Technical assistance can be provided, both to landowners and governmental associations, as to how to secure the benefits of wetlands, rather than converting these wetlands to other uses. Education and technical assistance could be provided by a number of organizations such as State fish and wildlife agencies, conservation districts, universities, and extension specialists.

The essence of financial incentive programs is to compensate landowners for the broader societal benefits of wetlands; incentives strive for conservation with compensation. Historically, agricultural landowners have responded to educational, technical, and financial

incentives for benefits that accrue to society at large. In addition, incentive programs are not viewed as being forced on the landowner; they can participate and receive benefits or not participate and get no incentive payments.

The Food Security Act of 1985 (Farm Bill) contains a number of incentive programs that foster wetland conservation. The Conservation Reserve Program (CRP) was written to take highly erodible land out of production; and has had major benefits for wetlands and wildlife. Wetlands that had been cropped in two of the last five years were made eligible for CRP enrollment early this year, as were filter strips and overflow scour areas along rivers, ponds, and reservoirs. We believe that protection of wetland values can, and should be, continued as a central theme in the 1990 Farm Bill.

The "Swampbuster" provisions of the Farm Bill prohibit commodity payments and the benefits of other specific programs to farmers who convert wetlands. Swampbuster relies on "cross compliance" for effectiveness. This allows landowners to make the ultimate decision on what will occur on their land; farm program payments are denied to those not in compliance with Swampbuster provisions. However, these Swampbuster provisions allow wetland drainage as long as the drained areas are not planted in commodity crops.

The Water Bank Program (WBP), separate from the Farm Bill, compensates landowners to protect wetlands. The WBP consists of 10-year leases on permanent wetland complexes. The Association supports the issuance of long-term or perpetual easements under the Water Bank Program. In addition, the Association supports making all wetlands eligible (temporary wetlands are currently ineligible) for the Water Bank Program and expanding the program to the entire Nation.

Another method of increasing the effectiveness of incentive programs is to allow "piggybacking" on existing wetland protection programs. The Association, with other conservation organizations, recommended that $10 million be appropriated to the U.S. Fish and Wildlife Service in FY 1990 to allow additional and complementary incentives for wetland habitat protection on private lands. A small addition of money over the incentives of CRP or Water Bank may be enough for landowners to enhance wetland values on their land. In several states, such as North Dakota, "wrap around" easements have been used to supplement CRP programs.

REGULATIONS

The regulatory process is another way of protecting wetlands. The Association is aware of growing interest in extending the Clean Water Act's Section 404 regulatory program to include wetland drainage as well as filling. However, opposition to this idea is likely to be great. In addition, the current exemptions for normal agricultural and silvicultural activities and the National Permit for wetlands under ten acres effectively leave most wetlands outside the Section 404 program.

In spite of the shortcomings, the Association feels that consistent, adequate enforcement and implementation of existing regulations under Section 404 would enhance wetland protection. Full and vigorous implementation of Section 404 provisions would protect many wetlands but would still allow wetland conversion to occur.

Delegation of Section 404 activities to a state is allowed if the state has legislation to authorize Section 404 activities. This was done in Michigan in 1984; resulting in more timely, responsive wetland management. However, the costs and manpower are a burden to the state. Use of this option by other states would undoubtedly protect wetlands more effectively than the current Section 404 program.

ENFORCEMENT, IMPLEMENTATION OF CURRENT LAWS

The Association believes that the Congress, through past legislation, has created a number of avenues to protect wetlands if fully funded, implemented and enforced. Examples of this are the Water Resources Development Act and Refuge Revenue Sharing Act. Failure to fully fund the Refuge Revenue Sharing Act has caused opposition to wetland acquisitions in some critically important areas.

Refuge Revenue Sharing Act

Full Refuge Revenue Sharing Act payments were last made in 1979, and RRSA payments to all 50 states were deficient in 1987. This Federal default is adversely affecting wetland acquisition by the States and Federal government. Full funding would require about $6.5 million additionally each year. The Association considers full payments an obligation, not a discretionary budget item.

Water Resources Development Act

Another opportunity for wetland protection is the Water Resources Development Act (WRDA). Some portion of the Corps of Engineers (Corps) civil works program has had a devastating effect on our Nation's wetlands. Examples of this are the Mississippi River and Tributaries Project and the Tennessee-Tombigbee Waterway (TTW) Project. By way of the 1986 Act, Congress has provided the Corps substantial authority to become a leader in wetlands protection. The Corps is authorized, under WRDA, to acquire and protect 88,000 acres of wetlands to mitigate TTW. Unfortunately, it does not yet appear to be a priority with the Corps or those who approve their budget requests. The WRDA also provides the Bureau of Reclamation the opportunity to protect wetlands. Congress can help make it a priority; we strongly encourage full implementation of and appropriations for the WRDA.

North American Waterfowl Management Plan

The United States and Canada signed the North American Waterfowl Management Plan (Plan) in 1986. This historic agreement outlines a course of cooperative action by state, federal, and private organizations to rebuild populations of waterfowl and other wetland dependent species. The major component of this plan is habitat protection; the Plan calls for protecting and managing almost 2 million acres in the U.S. and 3.6 million acres in Canada. The Association is wholly supportive of the Plan, including the private lands initiatives designed to protect, restore, and enhance wetlands while keeping them in private ownership. We recommend that the Congress include the Plan as a major component of the national focus on wetland protection. Bills have been introduced in the House (H.R. 2322) and Senate (S. 804) to assist with Plan implementation. This includes sufficient funding to the U.S. Fish and Wildlife Service to fully fund the Plan's private land initiative programs.

FmHA Inventory Lands and Wetland Easement/Acquisition

The 1985 Food Security Act authorized the Farmer's Home Administration (FmHA) to allow fee title acquisition by State or Federal fish and wildlife management agencies or to establish wetland easements on FmHA inventory lands before reselling these lands. There are currently over 100,000 acres of wetlands in FmHA inventory with easement recommendations. Another 300,000 acres of wetlands will be included in new inventory lands. This allows a creative method for protecting wetland resources, reducing land purchase prices to farmers, and benefitting taxpayers.

RECOMMENDATIONS

The Association believes that a concerted effort on the part of federal and state governments, private organizations, and the public is needed to reduce wetland losses. We believe that this will take a combination of incentives, regulations, education, and enforcement of current wetland protection measures. In addition, the diversity of wetland types requires that all wetland protection measures be flexible and innovative to best suit the needs of a particular area.

The Association's testimony clearly illustrates the diverse array of programs aimed at protecting wetlands. When all these programs are viewed together, we are left with an incomplete "safety net" for protecting wetlands, even if all current programs were fully implemented. To achieve "no net loss", the Nation's wetlands clearly need further protection. As mentioned earlier, this further wetland protection will require a mix of incentives, regulations, education and undoubtedly more funding.

As these new programs are developed, a substantial effort in wetland protection can be done by using the tools currently available. The Association recommends the following activities which generally involve fully funding, implementing and enforcing current laws.

1) With reauthorization of the Farm Bill in 1990, amend CRP provisions to allow further wetland enrollment and amend Swampbuster provisions to make it more effective in preventing wetland conversion.

2) Implement the North American Waterfowl Management Plan which would protect nearly 2 million and 3.6 million acres of wetlands in the United States and Canada, respectively.

3) Fully fund the Refuge Revenue Sharing Act requiring an additional $6.5 million annually. This would meet a federal obligation and would assist State and Federal land acquisition.

4) Fund and implement the Water Resources Development Act. Mitigation procedures allow protection of tens of thousands of wetland acres.

5) Amend the Water Bank Program to make all wetlands eligible and extend the lease beyond ten years.

6) Explore the idea of a wetland voucher system whereby farmers would exchange wetland easements in fee title in exchange for commodity crops in storage or FmHA inventory lands.

Working for the Nature of Tomorrow.

NATIONAL WILDLIFE FEDERATION

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STATEMENT OF

THE NATIONAL WILDLIFE FEDERATION

BEFORE

THE SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT OF THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE

ON

PUTTING A STOP TO THE AGRICULTURAL CONVERSION OF WETLANDS

MAY 17, 1989

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Submitted on Behalf of the Following Organizations:

National Wildlife Federation
Environmental Defense Fund
Izaak Walton League of America

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PUTTING A STOP TO THE AGRICULTURAL CONVERSION OF WETLANDS

Mr. Chairman and Members of the Subcommittee, the National Wildlife Federation appreciates the opportunity to provide the following statement on the effectiveness of existing programs for protecting wetlands from agricultural conversion and measures to halt such conversion. The National Wildlife Federation (NWF) and our 51 state and territory-wide affiliate organizations have, since their inception, maintained a strong commitment to the protection of our Nation's wetlands. We have contributed our expertise and our views regarding wetlands protection in Congress, in the courts, and in the agencies at virtually every opportunity. We consider ourselves partners in a national effort to preserve one of our most vital natural resources.

The Environmental Defense Fund (EDF) is a national non-profit organization that has been active for over 20 years in the protection of wetlands, wildlife and other environmental resources. The EDF has approximately 50,000 members from all states of the U.S., and maintains offices in seven cities.

Formed in 1922 over concern for our Nation's declining water quality, the Izaak Walton League of America has a long history of interest in wetlands preservation. The League first passed a resolution advocating protection of a wetland in 1926. Our more than 50,000 members nationwide are avid hunters and fishermen, conservationists, and outdoor enthusiasts who depend on wetlands for their recreation and enjoyment.

Most recently, NWF and EDF have participated in the National Wetlands Policy Forum, a diverse group of business, environmental, agricultural, and governmental leaders, which produced a Final Report in 1988 making over 100 recommendations for national wetlands protection. The Final Report, and its suggested "no overall net

loss" of wetlands goal, have been endorsed by President Bush. Many of the suggestions set forth in this testimony come directly from the Forum Report.

The purpose of this hearing and this testimony is not to repeat the fact that wetlands are an important national resource, or that they are being destroyed at an alarming and unacceptable rate, or that we as a Nation must stop wetlands destruction. The National Wetlands Policy Forum Report and President Bush's endorsement of the Report demonstrate a strong national consensus that wetlands are indeed valuable natural resources vital to our present and future standard of living, that we have already lost too many of our Nation's wetlands, and that we must find ways to achieve the no overall net loss of our wetlands in the short term and to increase the quality and quantity of our wetland base in the long term. The purpose of this hearing is to identify the specific measures which must be implemented to achieve these goals, particularly those measures which require new federal legislation.

The Subcommittee has asked this panel to narrow its focus even further. Recognizing that between the mid-1950s to the mid-1970s, 87% of the wetland losses nationwide were attributable to agricultural conversion, the Subcommittee has asked this panel to focus on measures to halt the destruction of wetlands on agricultural lands. See, U.S. Fish and Wildlife Service, Wetlands of the United States: Current Status and Recent Trends 31 (1984) (Wetlands Status and Trends). This testimony describes the acreage, types, and functions of the wetlands threatened by agricultural conversion, and specifically addresses the threats to wetlands on agricultural lands, the limitations of existing programs for wetlands protection, and suggestions for effectively protecting and restoring wetlands on agricultural lands.

Our basic conclusions are as follows:

1. Wetlands on agricultural lands are being destroyed primarily through drainage, dredging, excavation, and clearing of wetland vegetation.

2. Existing wetlands programs do not prevent these losses.

3. Measures to stop the agricultural conversion of wetlands must include:

a. Expanding the activities covered by the Clean Water Act §404 permit program to clarify that the activities covered by §404 include not only the discharge of dredged or fill material in wetlands, but the draining, dredging, channelization, excavation, inundation, and clearing of wetlands.

b. Expanding existing federal programs for the acquisition and conservation of wetlands on private agricultural lands, including the acquisition of permanent wetland conservation easements.

c. Expanding existing federal programs, and encouraging private sector efforts, to restore previously converted wetlands and to enhance degraded wetlands.

AS MANY AS 70 MILLION OF THE REMAINING 90-95 MILLION WETLAND ACRES IN THIS COUNTRY ARE POTENTIALLY SUBJECT TO AGRICULTURAL CONVERSION.

According to the Soil Conservation Service's (SCS) 1982 Natural Resources Inventory(NRI) and the Department of Agriculture's 1986 Environmental Assessment for the Wetland Conservation Provisions of the Food Security Act of 1985 (USDA EA), of the estimated 95 or so million wetland acres remaining in the lower 48 states, about 70 million acres of nonfederal wetlands are potentially subject to agricultural conversion. USDA EA at 11. The remaining wetlands most vulnerable to agricultural conversion are palustrine (upland, generally fresh water) wetlands in private

ownership. Approximately 80% of wetlands not federally protected are privately owned. Of the 70.7 million acres of nonfederal palustrine wetlands, the 1982 NRI rated 5.1 million acres as having a moderate to high potential for conversion to cropland in 1982. About 85 percent of these 5.1 million wetland acres could be easily brought into production. Heimlich & Langner, "Swampbusting in Perspective," 41 Journ. of Soil & Water Conservation (No. 4) 219 (1986) (Swampbusting in Perspective).

Approximately 16 million acres of wetlands remaining in 1982 would have earned short-term positive returns if converted, assuming 1985 crop prices and subsidy program participation rates. Heimlich & Langner, "Swampbusting: Wetland Conversion and Farm Programs," USDA Ag. Econ. Rep. No. 551 (1986); Swampbusting in Perspective, pp. 220-221. Therefore, the 5.1 million acre estimate of wetlands with a high or medium potential for agricultural conversion probably represents the low end of the range.

THESE WETLANDS WHICH ARE SO VULNERABLE TO AGRICULTURAL CONVERSION PROVIDE ENORMOUS PUBLIC BENEFITS.

In 1984, the U.S. Fish and Wildlife Service (FWS) identified nine types of wetlands in the United States "that are in greatest jeopardy from a national standpoint." Wetlands Status and Trends, pp. 35-36. Agricultural conversion is a major threat to six of these nine types, including the prairie potholes of the Dakotas, Montana, and Minnesota, the Lower Mississippi River bottomlands, the palustrine wetlands of South Florida, the Nebraska Sandhills and Rainwater Basin, the pocosins of the North Carolina coastal plain, and western riparian wetlands. Swampbusting in

Perspective, pp. 223-224.

The Prairie Pothole Wetlands

The prairie potholes represent America's duck factory: "Prairie potholes are the most valuable inland marshes for waterfowl production in North America." Wetlands Status and Trends, p. 42. While the Prairie Pothole Region comprises only 10% of North America's waterfowl breeding area, it produces 50% or more of the continent's ducks. Id. About 87% of the ducks bred in the lower 48 states breed in the Dakotas, Minnesota, and Montana. Wittmier, "Prairie Potholes: Can We Save Them From The Plow?," 50 Outdoor America (No. 4), p. 9 (1985) ("Can We Save Potholes?"). When drought strikes Canadian breeding areas, the United States and especially North Dakota areas can be crucial to maintaining the continental waterfowl population.

The smaller, shallower potholes -- the ones most vulnerable to conversion -- are important to breeding pairs because these wetlands thaw early in the spring and provide abundant invertebrates and aquatic plant food. The large number of these small, isolated wetlands also facilitates waterfowl production by permitting breeding pairs to disperse and claim territory, and by reducing the risk of disease which is increased when waterfowl are concentrated on shrinking habitat. Wetlands Status and Trends, p. 43; Can We Save Potholes?, p. 9. Linder & Hubbard, "Wetland Values in the Prairie Pothole Region of North America," in Proceedings of Great Plains Agricultural Council (1982). Although these wetlands may hold water for only a short time each year that period is critical to migrating ducks for resting stops and for courtship and egg-laying. U.S. Fish & Wildlife Service, "Wetland Resource North

Dakota" (unpubl.).

In 1980, an estimated $638 million was spent by hunters pursuing migratory birds. U.S. Fish and Wildlife Service, 1980 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, p.70. Moreover, they are highly valued by the estimated 2 million duck hunters found in every state of the Union. Duck populations have crashed to their lowest levels in recorded history. The reason, according to FWS, is simple: loss of habitat. U.S. Fish & Wildlife Service, A National Waterfowl Management Plan for the United States 5 (1982). The loss of habitat in the United States precipitating this decline is directly attributable to the agricultural conversion of the highly productive prairie pothole wetlands.

Wildlife is far from being the only or even the most important reason for protecting prairie potholes. The prairie potholes of the Dakotas are important in recharging groundwater aquifers in this region. Hubbard & Linder, "Spring Runoff Retention in Prairie Pothole Wetlands," 41 Journ. of Soil and Water Conservation (No. 2) 122 (1986). One study in Northeastern South Dakota has estimated that 213 wetlands produced a total minimum recharge of about 12 acre-feet in a 1602-acre area. This volume could irrigate 160 acres with 1.4 inches of water, or supply water for 1,699 head of cattle for 1 year. Id.

Because prairie wetlands are hydraulically connected with the water table, their drainage should eventually result in declines in water table elevation. Id. The reverse is true if wetlands are saved. Thus prairie potholes are really "savings banks" for groundwater when drought strikes, as it often has in the Dakotas, with vicious effects

on agriculture. Brun, et al., "Stream Flow Changes in the Southern Red River Valley of North Dakota," 38 North Dakota Farm Research Bimonthly Bull. (No. 5) 11 (1981) ("Stream Flow Changes in Red River Valley").

Flooding is a substantial problem in the Dakotas and can often lead to total destruction of crops and bridges, damage to homes and businesses, and erosion of valuable soils. In Enderlin, North Dakota, major sections of the town have been abandoned to repeated flooding, a phenomenon that has developed in only the last 25 years. Stream Flow Changes in Red River Valley, p. 11. Drainage of wetlands that would otherwise store excess water is a factor that has aggravated unprecedented flooding in the Southern Red River Valley in North Dakota. Id.; Ludden, et al., "Water Storage Capacity of Natural Wetland Depressions in the Devils Lake Basin of North Dakota," 38 Journ. of Soil and Water Conservation (No. 1) 45 (1983). While climate plays a major role in the timing and degree of flooding, potholes reduce flood flows.

Prairie pothole wetlands store spring snow melt and storm runoff and thereby moderate flooding in the Dakotas. The 213 small wetlands in the 1602-acre South Dakota study area discussed above retained a minimum of 158.7 acre-feet of water during the spring thaw. Drainage of these wetlands would contribute to flooding at lower elevations in the watershed under certain conditions. Id. Prairie potholes in the Devils Lake Basin of North Dakota have a maximum storage capacity of 657,000 acre-feet, and retain 72% of the total runoff of a 2 year event. These potholes would retain about 41% of the total runoff of a 100 year event. Ludden, et al., "Water Storage Capacity of Natural Wetland Depressions in the Devils Lake Basin of North Dakota,"

38 Journ. of Soil and Water Conservation (No. 1) 45 (1983). Drainage of these wetlands could significantly affect flooding in the Devils Lake Basin.

Despite the importance of these prairie wetlands, they continue to be drained at a rate of some 20,000 acres per year. Department of Interior, The Impact of Federal Programs on Wetlands (Volume I) 80 (1988) (DOI Report). According to FWS's National Wetlands Inventory, only 5.3 million of the original 17 million acres of prairie wetlands in the prairie pothole region of the Dakotas and Minnesota remain today. Most of this destruction was caused by conversion to farming. Wetland Status and Trends, p. 42. About 588,000 wetland acres in this region have a moderate to high potential for conversion to agriculture. Swampbusting in Perspective, p. 223.

The Lower Mississippi River Valley Bottomlands

The bottomland hardwood forests of the Lower Mississippi floodplain are forested wetlands characterized by such tree species as gum and cypress in the lowest areas, and water-tolerant oaks and water hickory on slightly higher ground. Bottomland hardwood forests provide highly valuable fish and wildlife habitat.

The lower bottomland areas, the swamps and semi-permanently flooded zones, are used extensively by migrating waterfowl as staging and overwintering areas. Two and one half million of the three million mallards of the Mississippi Flyway, and virtually all of the four million wood ducks, use these wetlands as overwintering grounds. DOI Report at 39.

Mink, otter, and beaver inhabit these lower bottomlands, as well. Indeed, the Louisiana bottomlands produce a larger annual fur harvest than any other state-- up

to 65% of all U.S. production. Harris and Gosselink, "Cumulative impacts of bottomland hardwood conversion on hydrology, water quality, and terrestrial wildlife." (1986) (Unpubl. Report). Flooded bottomlands also provide important fish spawning and feeding habitat, supporting some of the highest fish populations of any habitat. Harris, et al., "Bottomland Hardwoods: Valuable, vanishing, vulnerable." (1984).

In addition to providing vital fish and wildlife habitat, the bottomland hardwood wetlands are effective nutrient filters, particularly in converting inorganic nitrogen and phosphorus to organic forms. These nutrients are absorbed in bottomland soils and taken up by forest vegetation. Harris and Gosselink (1986). Toxic substances, such as pesticide residues, and other heavy metals and chlorinated hydrocarbons, may also be removed from streamflows by bottomland hardwood wetlands. Such removal probably occurs by adsorption onto suspended sediments, followed by incorporation and stabilization in the sediment. Office of Technology Assessment, Wetlands: Their Use and Regulation 49 (1984) (OTA Report); Wetlands Status and Trends, p. 18. This filtering function of the remaining bottomlands is particularly important in light of the high rate of conversion to agriculture and the associated increases in agricultural run-off in the Lower Mississippi River Valley.

Bottomland hardwoods also provide an important erosion control function, thereby simultaneously conserving soil and enhancing water quality. These wetlands reduce water velocity and retain soil in two major ways: first, the broad flat floodplain provides for meanders and overbank flooding, giving the water more area to spread out; second, the wetland vegetation acts in several ways to hold the soil. Harris, et al.

(1984). Bottomland trees, shrubs, and vines reduce wave and current velocity by friction, and extensive, shallow root systems bind the sediments and stabilize the shoreline. Id.

Bottomland hardwoods provide flood storage and modify storm flows by temporarily storing surface water volume on the wetland, by recharging surficial aquifers, and by reducing flood water velocities. Id. Numerous studies have shown lowering of flood hydrograph peaks associated with bottomland hardwood floodplains. Harris and Gosselink (1986). Bottomland hardwood wetlands may also store groundwater and contribute baseflow to streams during dry periods. Brinson, et al., Riparian Ecosystems: Their ecology and status." (1981).

Only about 20% of the original bottomland hardwood wetlands, about 4-5 million acres, remain. DOI Report at 39. This wetland type is one of the most rapidly diminishing in the United States, with an estimated 2%, or over 100,000 acre, annual loss of the remaining wetlands. Id. A 1982 National Research Council study predicted that the most extensive wetland losses will continue in this region, with another 1.5 million acres expected to be lost by 1995. About 9% of the approximately 4.3 million acres of non-federal wetlands in this area, about 387,000 wetland acres, are considered to have a moderate to high potential for conversion. Heimlich and Langner (1986).

South Florida Palustrine Wetlands

South Florida's palustrine wetlands provide freshwater run-off which maintains the salinity balance in coastal estuaries supporting 85 percent of Florida's coastal

marine fishery. Wetlands Status and Trends, pp. 40-41. These wetlands also provide breeding and wintering habitat for many bird species, and support a number of endangered species. Id. Agricultural conversion and projects to protect agricultural land from floods have been major factors in past wetland conversion. Id. Approximately 382,500 wetland acres in this region were rated in the 1982 NRI as having a moderate to high potential for conversion. Swampbusting in Perspective, p. 223.

Nebraska's Sandhills and Rainwater Basin

Nebraska's Sandhills and Rainwater Basin areas are migration stopovers critical for waterfowl and sandhill cranes in the Central Flyway. Wetlands Status and Trends, pp. 46-48. Agricultural conversion and irrigation-related wetland losses have concentrated migratory birds in remaining wetlands, resulting in increased incidence of disease. Id. About 128,850 wetland acres are estimated to have a moderate to high potential for conversion in this area. Swampbusting in Perspective, p. 223.

North Carolina Pocosin Wetlands

The North Carolina pocosin wetlands are principal groundwater recharge areas, and, like the South Florida wetlands, provide fresh water run-off essential to maintaining the salinity balance of the coastal estuaries. These wetlands also provide important wildlife habitat. Wetlands Status and Trends, pp. 49-50. The SCS has estimated that about 380,000 acres of pocosin wetlands in North Carolina have a moderate to high potential for agricultural conversion. However, conversion may be profitable on a much larger acreage due to economies of scale in large-scale wetland

conversions. Swampbusting in Perspective, pp. 223.

Western Riparian Wetlands

The western riparian wetlands provide important food and cover for resident and migratory species of fish and wildlife in what are otherwise arid regions. Wetlands Status and Trends, pp. 50-51. These areas have been reduced significantly, in part due to agricultural conversion. Id. About 35,000 wetland acres in this area have a moderate to high conversion potential. Swampbusting in Perspective, pp. 223-224.

WETLANDS ON AGRICULTURAL LANDS ARE BEING DESTROYED PRIMARILY THROUGH DRAINAGE, DREDGING, EXCAVATION, AND CLEARING OF WETLAND VEGETATION.

Most wetland conversions to agriculture are caused by drainage and/or clearing of wetlands. OTA Report at 109, Table 18; USDA EA at 8-9. Such drainage has been a major factor in wetland conversion in the prairie potholes and in Nebraska, California, the Lower Mississippi River Valley, North and South Carolina, and South Florida. OTA Report at 121. DOI Report at 40-41, 81. Of the approximately 11.7 million freshwater wetland acres converted to agriculture between the mid-1950s and the mid-1970s, about half were forested wetlands first cut for timber and then converted to agriculture. USDA EA at 7.

Dredging and excavation of wetlands has also been a significant cause of agricultural wetland losses. These practices involve the direct removal of wetland vegetation and the underlying wetland soil. OTA Report at 119. Dredging and channelization for drainage and flood control has resulted in wetland conversions to

agriculture. For example, stream channelization under the SCS P.L.-566 program induced considerable wetland conversion to agriculture in the prairie pothole states, not only because of direct losses but because the stream channelization provided an outlet for farmers' drains. DOI Report at 93. Excavation of wetlands for irrigation reuse pits has caused the partial drainage of some wetlands and the flooding of others for agriculture in Nebraska's Rainwater Basin. OTA Report at 120, Table 18.

WETLANDS ARE ALSO BEING LOST TO AGRICULTURE THROUGH INUNDATION, WATER DIVERSION, AND POLLUTION.

Flooding of wetlands is another significant cause of agricultural wetlands loss. Flooding has been associated with agricultural conversions of wetlands in the prairie potholes, with impoundments for agricultural water supply and flood control in the Lower Mississippi River Valley, the Lower Colorado River Valley, and Nebraska, and with aquaculture in Louisiana. OTA Report at 122, Table 18. See USDA EA at 9. The 1988 DOI Report notes, for example, that the Garrison dam and reservoir inundated approximately 55,000 acres of wetlands in North Dakota, and that the dams and reservoirs constructed by the Corps of Engineers (Corps) on the Missouri River during the 1950s and 1960s inundated and destroyed all the riparian wetlands and oxbow lakes in North and South Dakota (approximately 388,000 acres). DOI Report at 93.

Withdrawals and diversions of water for irrigation and flood control can lower the water table or actually dewater freshwater wetlands. In addition, diverting fresh water inflow in coastal areas will increase salt water intrusion into brackish and freshwater wetlands, destroying wetlands vegetation and reducing estuarine species

diversity and productivity. OTA Report at 123.

Finally, another major contributor to the loss of wetlands is agricultural run-off. In particular, wetlands are filled with eroded soil from agricultural lands in the Chesapeake Bay area, the prairie potholes, and Nebraska. OTA Report at 124. USDA EA at 9. Pesticide residues and nutrients from fertilizers often end up in wetlands on agricultural lands, contaminating and degrading wetlands. USDA EA at 9; Forum Report at 46; Grue, et al., "Agricultural Chemicals and Prairie Pothole Wetlands: Meeting the Needs of the Resource and the Farmer--U.S. Perspective." (1989). Probably the most well-known illustration of this problem is the contamination of the Kesterson National Wildlife Refuge in California with selenium and other contaminants from irrigation return flows. See Feierabend and Zelazny, Status Report on Our Nation's Wetlands 33 (1987).

Our freshwater wetlands are being drained, dredged, cleared of vegetation, inundated, dewatered, and polluted for agricultural production at an estimated rate of 250, 000 acres per year. OTA Report at 108. These wetlands provide vital fish and wildlife habitat, flood control, water purification, and groundwater recharge functions. Between the mid-1950s and the mid-1970s, the Nation lost an estimated 11 million acres of these wetlands to agricultural use. OTA Report at 108. There are probably an additional 10 million wetland acres remaining that are particularly vulnerable to agricultural conversion. These are the wetlands which this Nation must take immediate steps to protect. We must also proceed with the restoration of previously converted wetlands, particularly those which can provide significant hydrological and

biological functions.

EXISTING PROGRAMS FOR PROTECTING WETLANDS FROM AGRICULTURAL CONVERSION ARE INADEQUATE.

Existing programs for protecting wetlands simply are not adequate to protect the 10 million or so wetlands most vulnerable to agricultural conversion, to protect the other freshwater wetlands potentially subject to such conversion, or to begin to restore the wetlands that have already been converted for agricultural production. At the federal level, the two most important "regulatory" or "quasi-regulatory" programs are the Clean Water Act §404 dredged and fill material permit program administered jointly by the Corps and the Environmental Protection Agency (EPA), and the "Swampbuster" provision of the 1985 Food Security Act administered by the Agricultural Stabilization Service (ASCS) and the SCS within the USDA. Other programs which have the potential to protect wetlands on agricultural lands are federal conservation easement and fee title acquisition programs. The limitations of these federal programs are discussed in detail below. While many states now have wetlands protection programs, they generally suffer from the same deficiencies as the analogous federal programs, and thus cannot be relied upon to meet the challenge of halting the agricultural conversion of wetlands.

The §404 Permit Program Has Little Effect on Agricultural Wetland Conversions.

The Clean Water Act (CWA) §404 permit program regulates the discharge of dredged or fill material into wetlands. The Corps has generally refused to regulate the

discharge of dredged or fill material that accompanies drainage, ditching, excavation, and the clearing of wetland vegetation, referring to such discharges as "de minimus." Consequently, many agricultural conversion activities simply are not regulated by the Corps under §404. This gap in wetland regulation is made distressingly clear in the following excerpt from a 1986 public notice issued by the Corps' Wilmington, North Carolina District, in which the Corps actually offers wetland drainage as a recipe for *avoiding* regulation under §404:

> Because of the wetland elevation and the relatively steep terrain, an alternative available to the applicant is the construction of a permanent drainage system within all of the wetlands which would effectively remove the near surface water on which the wetlands rely. The applicant has the ability to construct such a drainage system so as to avoid the discharge of dredged or fill material into the surrounding waters or wetlands and avoid the requirement of a Department of the Army permit. It is anticipated that, within a few months, probably one growing season, the existing wetlands would be permanently altered to the extent that they would cease to qualify as "waters of the United States" under the jurisdiction of the Corps of Engineers pursuant to Section 404 of the Clean Water Act.

Even when a discharge or dredged or fill material is involved, the wetlands conversion may be exempted from permit review because it involves an isolated wetland which does not meet the "interstate commerce test" for classification as "waters of the United States," or because it qualifies for a Nationwide Permit 26 for isolated wetlands and wetlands above the headwaters of a river or stream or for some other general permit. Furthermore, the conversion activity may be considered exempted from the permit requirement, even though the §404(f)(1) exemptions do not apply where conversion activity brings an area into a new use. See, OTA Report at 110. The USDA observed in its EA on the Swampbuster program:

> "The effectiveness of this program [404] in restricting wetland losses, especially the loss of small wetlands areas to agriculture, is limited because drainage as such is not regulated and because general permits authorizing discharges in small, isolated bodies of water are used. This permit program has been in effect since the early 1970's and the data on wetlands losses to agriculture between that time and the present point to its inability to control them."
>
> USDA EA at 4.

The Swampbuster Provision of the 1985 Food Security Act Does Not Adequately Protect Wetlands from Agricultural Conversion.

Swampbuster Limitations as a Wetlands Protection Law

Swampbuster does not prohibit wetland destruction; Swampbuster simply provides that the federal government will not continue to extend a broad range of federal farm subsidies to a producer who drains, fills, or otherwise manipulates a wetland and plants an agricultural commodity on that converted wetland.

As a wetlands protection statute, Swampbuster has several critical limitations. First, it does not penalize a farmer for draining or otherwise manipulating a wetland. Only in a year when a producer plants a commodity, i.e., a crop produced by annual tilling, does the producer risk losing benefits. Consequently, a producer can drain a wetland and decide from year to year whether to plant an annual crop and risk loss of farm benefits. In those years in which the producer wants to ensure receipt of benefits, he can either forego planting in the converted wetland, or plant a perennial crop there.

Another fundamental limitation is that Swampbuster only discourages farmers who participate in federal farm programs. Therefore, those farm operations which do

not produce crops with commodity price supports or rely on other federally-subsidized loan and insurance programs, can ignore Swampbuster altogether. Similarly, as crop prices rise or farm subsidies are cut in the future, farmers will have less to lose by cropping converted wetlands in violation of Swampbuster.

Finally, Congress enacted certain exemptions to Swampbuster which further limit its effectiveness in reducing wetland conversion. The most significant exemption is that for wetland conversion which "commenced" prior to passage of the Food Security Act (FSA) in December, 1985. If a producer actually began "moving dirt," or committed significant funds for conversion through a contract or purchase of conversion supplies, prior to December 23, 1985, the wetlands converted through that activity or investment can continue to be cropped without triggering Swampbuster sanctions.

Other exemptions which can limit Swampbuster effectiveness are the "third party" exemption, which immunizes a producer who crops a wetland converted by activity beyond his control, and the "minimal effect" exemption, which permits minor wetland conversion activity which will have only a de minimus effect on wetland function. In general, we believe a strictly enforced Swampbuster law can make wetland conversion more costly, and thereby discourage some wetland loss. However, the greatest contribution of Swampbuster to wetlands conservation is probably to ensure greater consistency between federal wetlands protection policy and programs, on the one hand, and federal farm and flood protection programs on the other.

Swampbuster Implementation Has Been Poor.

The National Wildlife Federation has been actively monitoring the implementation of Swampbuster since its enactment in 1985. We believe the implementation record developed over the three full years since enactment is appropriate for review at this time. The record shows that though Swampbuster may indeed be a significant disincentive for agricultural drainage, implementation of the act is dismal. Over the last three years, NWF's Prairie Wetlands Resource Center has submitted literally hundreds of Freedom of Information Act requests to ASCS county committees in the prairie pothole region of North Dakota, South Dakota and Minnesota. The information we received through these requests is disheartening - farmers who drained wetlands were rarely found in violation and their activities were often exempted entirely from the legislation. In case after case, ASCS county committees misconstrued, misapplied or ignored the Swampbuster legislation in order to excuse farmers for wetland drainage activity. Although the FWS alone reported 346 potential Swampbuster violations in North Dakota, South Dakota and Minnesota during the years 1987-1988 (personal correspondence, FWS), to our knowledge only three farmers lost their agricultural subsidies.

The most frequently used method of circumventing Swampbuster has been application of the commenced exemption. The ASCS county committees have frequently granted exemptions which were unjustified by the regulations and in some cases in direct defiance of an ASCS Deputy Administrator's ruling. For example, in April of 1987, the Bottineau County, North Dakota, ASCS Committee granted

Bottineau County Water Resource District a commenced determination for White Spur/Stone Creek drainage project affecting over 6,000 acres of prairie wetlands. In April of the same year, ASCS Deputy Administrator reversed the exemption. In September, despite direct instructions from ASCS Deputy Administrator in Washington, DC, the rogue Bottineau County Committee reconsidered the Water Resource District request and granted a commenced determination. At this very moment, wetlands in the White Spur\Stone Creek area are being converted for production of agricultural commodities. This action is taking place in direct violation of Swampbuster. To rectify this situation, the NWF filed litigation on April 20, 1989. See Attachment A.

According to its own figures, the ASCS has granted over 80 percent of the 810 requests for commenced conversion exemptions in North Dakota, South Dakota, and Minnesota during the years 1987 and 1988. NWF's Prairie Wetlands Resource Center, utilizing an informal appeals process, has requested the reversal of five erroneous Swampbuster decisions in North Dakota and Minnesota. These individual and project exemptions affect the fate of close to 10,000 acres of wetlands. ASCS continues to delay the final decisions in these cases, and that delay is often used to the advantage of drainage proponents. If it is ultimately determined that the project or individual violates Swampbuster, the drainage proponents claim that they acted in reasonable reliance on the county's erroneous decision and that the drainage should therefore be exempted from Swampbuster.

A case in point is the exemption granted to five large drainage projects in Wells

County, North Dakota. The Prairie Wetlands Resource Center informally appealed the exemptions on August 15, 1988. In November, the Center received acknowledgement that the exemptions were improperly granted and advised us that they would be reversed. However, as of this date, ASCS has not notified any of the almost 300 producers that their exemption was invalid. By failing to notify the producers in Wells County, ASCS has seriously jeopardized the fate of over 5,400 acres of wetlands. As of April of this year, over nine months after the National Wildlife Federation appeal, the fate of the Wells County wetlands has not been ultimately decided.

Even when ASCS finds a clear violation of Swampbuster, the agency has exempted parties from penalty. In the case of Minnesota's Yellow Medicine River Watershed District's Ditch 18, the ASCS in Minnesota found that the project had commenced before the enactment of the FSA, and was therefore not subject to the financial disincentives of Swampbuster. NWF filed an informal appeal with the ASCS because the prerequisites to a commenced conversion exemption had not been met: not even the preliminary engineering plan for the proposed project had been completed prior to December 23, 1985, and there had been no work towards installation of the ditch, no construction contract, and no purchase of materials prior to the enactment of Swampbuster.

The ASCS Deputy Administrator of State and County Operations reversed the exemption. However, the producers in the assessment area appealed the ASCS determination. That appeal is heard by a different and independent branch of the ASCS than that which considers the informal, non-producers' appeals. Thus, the

ASCS not only expends a tremendous amount of time and energy duplicating its own efforts, but the ASCS Administrator may be confronted with conflicting recommendations from his staff.

Moreover, the hearing is unfairly one-sided. Although the National Wildlife Federation brought Ditch 18 to the attention of the ASCS in Washington D.C., ASCS policy prohibits non-producers from participating in the hearing without the consent of the producer. Predictably, we were not present when the Ditch 18 proponents stated their case.

The final decision on Ditch 18 was not reached until March 30, 1989. Close to two years after the NWF appeal. The ASCS decision again favored the actions of the producer. Though affirming that Ditch 18 was not eligible for a commenced determination, ASCS granted relief to those producers who took action based on the erroneous decision of the Minnesota State Committee. (Attachment B).

On a national scale, a close analysis of the ASCS Cumulative Data Reports on Swampbuster implementation demonstrate that these reports are inaccurate, potentially deceptive, and that Swampbuster is not being vigorously implemented. According to the January/February 1989 report (Attachment C), 345 producers have been determined ineligible for program benefits as a result of Swampbuster non-compliance. However, 337 of these producers have chosen to appeal their ineligibility. Of the cases appealed, ASCS has sided to the detriment of the wetland resource in 206 or 61% of the cases. Seventy-one or 21% of the appeals have been denied. Sixty or 18% of the appeals are pending. If one applies the percentage of

approval to those cases pending, 37 additional cases will side with the producer. Thus, in the three full years since enactment of the FSA, only 94 individuals will ultimately be found ineligible for program benefits.

Even those 71 producers which ASCS claims have been conclusively found ineligible for program benefits may not ultimately have their payments withheld. Many of these producers have requested Swampbuster exemptions or wetland redeterminations which are not treated as appeals in the cumulative data reports and are not reflected in the number of producers determined ineligible for program benefits. This comparison is easily substantiated by comparing appeals not approved and the dollar amount withheld. (Attachment D). For example, in October of 1988, 56 individuals were determined ineligible for benefits totalling $781,166.02. However, in the November\December cumulative data report even though the number of individuals found ineligible for program benefits increased to 87, only $395,017.05 was withheld. Significantly, the dollar amount has decreased by $386,148.97 (49%).

Of the 71 producers who seem to have been conclusively determined ineligible for program benefits, 45 (61%) reside in Minnesota. FWS estimates that less than 10 (22%) of the non-complying producers in Minnesota have been conclusively withheld benefits. The remaining have requested some sort of exemption or wetland redetermination to excuse their drainage activity. This is substantiated by a comparison of appeals not approved for the state of Minnesota. (Attachment E). In the November/December cumulative data reports, ASCS indicated 61 appeals not approved. However, in the ASCS cumulative data report for January\February 1989,

only 45 appeals are indicated not approved. This difference of 16 (26%) indicates ASCS has granted additional relief to producers through exemptions or application for exemption from November\December to January\February. At this rate over a period of the next few months, it can be estimated that only a handful of individuals will be found conclusively in violation of Swampbuster. If Minnesota is characteristic of the rest of the country, then it is probable that less than 15 individuals in the entire United States will actually lose benefits due to wetland conversions to agricultural production which have occurred since the enactment of Swampbuster.

In summary, Swampbuster can only discourage wetland conversion to agriculture, not prohibit it. In addition it is only effective with those agricultural producers who rely heavily on commodity program subsidies. Even in those situations in which Swampbuster could be a strong deterrent to wetlands conversion to crop production, it has not been due to poor implementation, particularly on the part of ASCS county and state committees. Swampbuster, as currently written and implemented, will not stop the conversion of wetlands to agriculture.

FmHA Has Failed to Exercise Its Authority to Protect Agricultural Wetlands through Conservation Easements.

While the placement of conservation easements on agricultural lands subject to Farmers' Home Administration (FmHA) loans cannot protect all wetlands subject to agricultural conversion, FmHA has had a tremendous opportunity to protect many wetlands without infringing on private property rights and without great expense to the government. Yet the agency has failed to capitalize on this opportunity. Under the

FSA, FmHA has the authority to "write down" the debt of agricultural producers in exchange for conservation easements protecting wetlands on their land. Section 1318, P.L. 99-198. However, FmHA loan servicing regulations do not actively encourage the exchange of debt write down for conservation easements, and few agricultural producers are believed to have actually used this debt restructure option.

FmHA also has the authority, indeed the *mandate*, to put conservation easements on agricultural lands that have been returned to FmHA inventory due to delinquent debt, where such lands include wetlands and floodplains. Executive Orders 11988 and 11990; Section1314, P.L. 99-198. FmHA also has the authority to transfer inventory lands with wetlands in fee title to federal or state conservation agencies for wetland conservation. Section 616, P.L. 100-233. Again, FmHA appears to be dragging its feet in exercising this authority. There are approximately 1.5 million acres (5100 tracts) of land in FmHA inventory, of which FWS and states have requested conservation easements on 100,000 to 150,000 acres (1200 tracts). Only about 100 of these requests have been approved and finalized. The vast majority of wetland acres covered by these requests are still pending within FmHA. Several requests by conservation agencies for the transfer of inventory lands with wetlands have been rejected by FmHA. It is estimated that almost one half million wetland acres could be protected from agricultural conversion if FmHA would vigorously exercise its conservation easement and inventory land transfer authorities.

The Conservation Reserve Program Does Not Provide Long-term Protection to Wetlands.

The Conservation Reserve Program (CRP) established in the FSA pays farmers to retire from agricultural production highly erodible and other environmentally sensitive lands, including wetlands. Lands must remain in the CRP for 10 years. The CRP can be used to protect wetlands both by providing opportunities to restore converted or cropped wetlands included within highly erodible fields enrolled in the reserve, or by including cropped wetlands themselves in the CRP under new eligibility rules promulgated in January, 1989. An estimated 200,000 to 300,000 wetland acres were bid for inclusion in the CRP in the first sign up opportunity for wetlands enrollment which occurred in February. Not all of these acres will actually be enrolled.

While CRP could potentially protect many of the most vulnerable wetlands from agricultural conversion and restore previously converted and degraded wetlands, such a program would be expensive and would provide only temporary protection. The average annual rental rate for CRP acres is $48.50 per acre. Based on this cost alone, the cost of protecting 5 million acres of wetlands from agricultural conversion for 10 years would be almost $2.5 billion. While this cost would be offset by savings in agricultural subsidy outlays, it also does not include any provision for cost sharing to restore or maintain wetlands, or funds to manage or enforce CRP contracts. Most importantly, this price tag does not buy permanent wetland protection.

The Water Bank Program Provides Only Localized, Temporary Wetlands Protection.

The Water Bank Program, administered by the ASCS, focuses on protecting wetlands for migratory bird habitat. The program operates primarily in the prairie pothole region of Minnesota, North Dakota, and South Dakota. Like CRP, Water Bank pays farmers annual rental payments in exchange for 10 year agreements to conserve wetlands on their property. Since about 1982, annual appropriations for Water Bank have remained at about $8 million, providing for the protection of about 167,000 wetland acres at any one time. DOI Report at 88; National Fish and Wildlife Foundation, Federal Agency Needs Assessment Fiscal Year 1990, USDA at 14; OTA Report at 73-74.

The FWS Wetlands Acquisition Program Protects Considerable Wetland Acreage, But Cannot Stop the Conversion of Wetlands to Agriculture.

FWS has an ongoing wetlands acquisition program authorized by the Migratory Bird Conservation Act, Fish and Wildlife Act of 1956, Endangered Species Act, and Fish and Wildlife Coordination Act. Funding for this acquisition is authorized under the Migratory Bird Hunting and Conservation Stamp Act (Duck Stamp Act), the Wetlands Loan Act, and the Land and Water Conservation Act. FWS proposed acquisition plans indicate an intent to acquire approximately 60,000 wetland acres in FY 1990.

The North American Waterfowl Plan is Also an Ambitious Wetland Conservation Effort, But Cannot be Relied Upon to Halt the Agricultural Conversion of Wetlands.

The North American Waterfowl Management Plan (NAWMP) is an ambitious partnership involving the U.S. government, the Canadian government, the states, and the private sector in protecting, restoring, and managing wetlands to restore North America's waterfowl populations. Wetlands protection is an important component of the Plan, but FWS is presently using its land acquisition and FSA authorities discussed above to implement the Plan. Consequently, at present the NAWMP is not providing substantial additional wetlands protection from agricultural conversion. While the NAWMP has the potential to protect a substantial amount of wetlands from conversion through its proposed combination of acquisition, management, restoration, economic incentives, and education, Plan implementation alone will not halt the conversion of wetlands to agriculture.

In conclusion, the CWA §404 program and Swampbuster programs, as currently implemented, can at best slow the rate of agricultural wetland conversions, but will not protect the remaining wetlands subject to agricultural conversion. Existing conservation easement and fee title acquisition programs, particularly as presently implemented and funded, are not adequate to protect even the 5-10 million most vulnerable wetland acres. An optimistic projection might be that we could protect about 2 million wetland acres from agricultural conversion over the next ten years through the CRP, Water Bank, FmHA easement authorities, and the FWS land acquisition program.

TO STOP THE CONVERSION OF WETLANDS TO AGRICULTURE WILL REQUIRE A COMBINATION OF REGULATORY CONTROLS, EASEMENT ACQUISITION, AND RESTORATION.

As the National Wetlands Policy Forum recognized, putting a stop to wetland losses in this country will require a combination of strategies which include, in particular:

1. Providing better incentives to private wetland owners to protect wetlands permanently for the public benefit, including the creation of an Agricultural Wetlands Reserve Program.

2. Reducing wetlands losses resulting from government programs, including the vigorous and consistent implementation of Swampbuster to eliminate government inducements for the conversion of wetlands to agriculture. Forum Report at 53.

3. Instituting more effective and even-handed regulatory programs to ensure that no types of wetland conversions--including those resulting from drainage, excavation, the destruction of vegetation, and other causes--are allowed to escape unreviewed because of the peculiarities in the wetlands protection laws and regulations.

4. Fully mitigating for unavoidable wetland losses and expanding programs for wetlands restoration, including an Agricultural Wetlands Reserve Program to fund the restoration of former wetlands converted to agriculture. Forum Report at 3-4.

These Forum strategies apply to the agricultural conversion of wetlands just as they do to wetland losses as a whole. While much can be done to implement these strategies without new legislation, new legislation is needed to stop the conversion of wetlands to agriculture.

Economic Incentives for Private Stewardship

With respect to better economic incentives for private stewardship, legislative changes must be made to either modify and expand existing easement and fee title acquisition

programs or to create a new wetlands reserve that will compensate owners of wetlands on agricultural lands to protect wetlands *permanently*. Permanent easements rather than 10 year contracts must be employed. In addition, new legislation is needed to authorize and fund the restoration and subsequent protection of former agricultural wetlands . Forum Report at 31. The Forum's National Wetlands Reserve Program and Water Bank recommendations should be considered. Senator Fowler's proposed Farm Conservation and Water Protection Act and Senator Lugar's proposed Conservation Enhancement and Improvement Act also offer legislation consistent with these concepts.

Strengthening of Swampbuster

Vigorous and consistent implementation of Swampbuster to eliminate incentives for agricultural conversion of wetlands is also important. However, in order to achieve this, we believe legislative changes are in order. First, Swampbuster may never discourage wetlands conversion effectively as long as the ASCS county committees are the primary administrators of the program. We believe that FWS, which has an active consultation role in Swampbuster implementation, should play a primary role in determining Swampbuster compliance. The county committees' inability to properly administer Swampbuster is a result of the following characteristics:

* **Agency bias.** The ASCS was created to assist farmers. Its employees are knowledgeable about agriculture and sympathetic to the agricultural community. County committees are reluctant to penalize farmers for the sake of poorly understood environmental values.

* **Personal bias.** To be eligible to become a committee member, an individual must be a resident farmer of the

county in which he is to serve. As a result, county committee members are frequently in the difficult position of rendering a decision which may harm friends or neighbors. Moreover, being members of the regulated community themselves, committee persons are often skeptical about strict Swampbuster sanctions.

* **Lack of expertise in wetland issues.** The ASCS has the responsibility of spot checking farms to ensure Swampbuster compliance. Unfortunately, ASCS personnel have little expertise in recognizing wetlands or in determining the scope and effect of drainage systems.

* **Lack of accountability.** County committee members are not professional agency staff. They are in office for three years and earn less than $75 per month for their services. Most of the committee members are full-time farmers. As a result, committee members have little professional or financial incentive to enforce laws or regulations with which they disagree.

In contrast to the ASCS, the FWS is ideally situated to determine Swampbuster compliance. FWS is already actively involved in Swampbuster implementation and its personnel are knowledgeable about wetland protection. Most importantly, the FWS does not suffer from the biases which characterize the ASCS county committees. FWS could be expected to impartially implement Swampbuster according to the law and the regulations. It should be emphasized that giving FWS responsibility for Swampbuster compliance determinations would not necessarily involve drastic procedural changes, and in many cases would be simpler and more efficient than it is currently.

At a minimum, the ASCS and SCS should be required to have FWS concurrence on each Swampbuster exemption determination. This authority would ensure that needed wetlands and wildlife expertise is brought to bear in monitoring

important decisions affecting the fate of wetlands. This role for the FWS would also lend needed outside objectivity to Swampbuster decisions.

A second important change is to make producers ineligible for benefits upon wetland conversion, regardless of whether a commodity crop is planted. The cropping requirement substantially diminishes the producer's incentive to preserve wetlands and also makes Swampbuster more difficult to monitor in the field. While ASCS, SCS, or FWS field personnel are likely to observe and report new drainage activity, they simply do not have the resources to systematically review previously converted wetlands to determine whether they are being planted to a commodity crop from year to year.

Furthermore, in light of the public resources at stake, Swampbuster should encourage and facilitate the participation of environmental organizations and concerned citizens. The legislation should establish and encourage the use of an effective procedure for reporting, recording, and following up on potential Swampbuster violations. In addition, the FSA should be clarified to expressly provide that a formal administrative appeal is available to non-producers as well as producers denied benefits. While the present statutory language seems to provide for such an appeal, the USDA regulations limit the right of appeal to producers. As a result, only a decision withholding subsidies and favoring wetlands protection can be "second-guessed" and reversed through the formal appeals process. There is no formal means of challenging a decision which favors the producer to the detriment of a wetland. The administering agencies must be held accountable to the public as well

as the producer.

Expanding the Scope of the Clean Water Act §404 Permit Program

Finally, Section 404 of the Clean Water Act should be amended to expressly state a national wetlands policy and goal of no overall net loss of wetlands and a long term increase in our wetlands base, and to clarify that the draining, dredging, excavating, inundating, and clearing of wetlands are covered by §404 to ensure that wetlands conversions to agriculture, like other wetlands conversions, are subject to permit review. While ongoing agricultural, silvicultural, and ranching activities would continue to be exempt from regulation, the conversion of wetlands to new land uses would require a §404 permit.

Through this combination of strategies, combined with increased wetlands research, planning, and public education efforts recommended by the Forum and others, we can stop the loss of our Nation's wetlands and begin to restore some of our past losses. Thank you, Mr. Chairman, for the opportunity to appear before the Subcommittee today to provide these comments.

ATTACHMENT A

Working for the Nature of Tomorrow

NATIONAL WILDLIFE FEDERATION

Prairie Wetlands Resource Center
1605 E. Capitol Avenue, Bismarck, N.D. 58501 (701) 222-2442

CERTIFIED MAIL

October 11, 1988

Mr. Milton J. Hertz
Administrator, ASCS
P.O. Box 2415
Washington D.C. 20013

Re: White Spur/Stone Creek drainage project

Dear Mr. Hertz:

On behalf of the National Wildlife Federation, Prairie Wetlands Resource Center, I wish to convey our concern with the commenced conversion exemption granted by the Bottineau County ASCS committee to the White Spur/Stone Creek drainage project. The exemption violates the Swampbuster legislation, the implementing rules and regulations, and ASCS Handbook 6-CP. We therefore request that you exercise your authority pursuant to 7 C.F.R. Section 7.1(d) (1988) and 7 C.F.R. Section 12.6(b)(2) (1988) to reverse the determination of the Bottineau County ASCS committee.

The following is a chronology of events leading to the commenced conversion determination:

7/75 - Emergency outlet channel constructed.

6/20/83 - Project established by Bottineau County Water Resource District.

12/23/85 - Enactment of the Food Security Act of 1985.

4/86 - Engineering report prepared by American Engineering. A copy of the report is attached as Exhibit A.

4/21/86 - Bottineau County Water Resource District approves application to drain.

8/25/86 - North Dakota State Engineer approves application to drain.

11/7/86 - Bottineau County Water Resource District requests commenced conversion exemption. A copy of the request is attached as Exhibit B.

1/22/87 - Bottineau County ASCS committee grants commenced conversion exemption to White Spur/Stone Creek drainage project. A copy of the notification is attached as Exhibit C.

4/24/87 - State ASCS office receives letter from Deputy Administrator requiring the rescission of the commenced determination as a result of amendments to ASCS Handbook 6-CP. A copy of the letter is attached as Exhibit D.

4/29/87 - Bottineau County ASCS committee receives letter from State ASCS office requiring the rescission of the commenced determination as a result of amendments to ASCS Handbook 6-CP. A copy of the letter is attached as Exhibit E.

5/19/87 - Bottineau County Water Resource District notifies State ASCS Administrator of its intention to appeal the denial of the commenced determination. A copy of the letter is attached as Exhibit F.

9/22/88 - Bottineau County ASCS committee reconsiders request for commenced determination.

9/29/88 - Bottineau County ASCS committee grants commenced conversion exemption to the White Spur/Stone Creek drainage project. A copy of the exemption notification is attached as Exhibit G.

Amendment 11 of Paragraph 91 of Handbook 6-CP, which was in effect when the county committee granted the commenced determination, permits a finding of commenced conversion if before December 23, 1985, all of the following applied:

1) A project drainage plan setting forth in detail the drainage measures or other works of improvement was officially adopted by the drainage district or other entity;

2) The drainage district or other entity did one or more of the following:

   A) The draining, dredging, leveling, filling, or other manipulation of a wetland, including any activity that results in impairing the flow, circulation, or reach of water;

   B) Legally committed substantial funds toward the conversion of wetlands by entering into a contract for the draining, dredging, leveling, filling, or other manipulation of a wetland, including any activity that

results in impairing the flow, circulation, or reach of water;

C) Purchased construction supplies or materials for the primary and direct purpose of converting the wetland;

3) The wetland conversion was the basis for a financial obligation to the drainage district or other entity, and there was a specific assessment for the project construction or a legal obligation to pay a specific assessment.

None of the prerequisites to a commenced determination was met. Construction had not begun on either the main ditch or on the laterals necessary to drain the majority of wetlands in the White Spur assessment area. Nor had substantial funds been expended by executing a construction contract or purchasing construction supplies or materials for the primary and direct purpose of converting wetlands.

It is also clear that a project drainage plan setting forth in detail the planned drainage measures was not officially adopted prior to the enactment of the Swampbuster provisions. The engineering report prepared by American Engineering was not completed until April of 1986. Even if the report had been in existence on December 23, 1985, it was insufficiently detailed to justify the exemption granted by the Bottineau County ASCS committee. The commenced determination granted to the White Spur/Stone Creek drainage project permits the construction of laterals necessary to drain all wetlands within the White Spur assessment area, with the exception of those wetlands specifically excluded by the State Engineer. The engineering report, however, identified and described only the main channels.

Finally, none of the producers within the White Spur/Stone Creek assessment area paid a specific assessment for the project construction prior to December 23, 1985, nor were they legally obligated to pay such an assessment.

The Bottineau County Water Resource District ("District") has made several arguments in support of an exemption from the Swampbuster legislation. Initially, the District contended that it was unfair to reverse the commenced determination once it was granted on January 1, 1987. It should be emphasized, however, that the Bottineau County Water Resource District did not detrimentally rely upon the erroneous County decision. The Deputy Administrator reversed the commenced determination three months after the exemption was granted. During that brief period, there was no construction, no contracts executed, and no supplies or materials purchased. In short, there were no activities in reliance upon the commenced conversion exemption of January 1, 1987.

The Board also suggested that the ASCS follow the precedent established by the Wells County ASCS committee in granting a blanket exemption to five drainage projects in that county. See the Board's letter of March 24, 1987, attached as Exhibit H. The Wells County committee adopted an "identification by omission" fiction to justify its actions. The National Wildlife Federation believes that the Wells County decision was based upon faulty reasoning and improper procedure. On August 15, 1988, we filed an informal appeal requesting that you exercise your authority to reverse the determination of the Wells County ASCS committee. Rather than reiterate our communication in its entirety, I have attached a copy of the informal appeal as Exhibit I (attachments not included). The discussion of "identification by omission" contained in Exhibit I is equally applicable to the White Spur/Stone Creek drainage project.

More recently, the Bottineau County Water Resource District argued that the drainage project was initiated in the 1970's with the construction of an emergency outlet channel. Although some temporary channelization was performed in 1975, it is incorrect to suggest that the construction was the beginning of a project which includes the White Spur/Stone Creek drainage project. At the time of the emergency channelization, there was no plan or report which set forth in detail the drainage measures contemplated by the White Spur/Stone Creek drainage project. A detailed engineering and hydrological report was not prepared until April 8, 1986--11 years after the temporary outlet was constructed.

The District's own documents indicate that the emergency channelization was considered a separate project from that now proposed. In a document entitled "Items for Consideration in Developing Criteria for Determining When Conversion Will be Considered to Have Been Commenced," the District stated that "[a]n emergency channel was installed near the outlet of White Spur/Stone Creek in 1975 at a cost of approximately $12,000. Earth moving has not begun on current project." A copy of the document is attached as Exhibit J.

Even if the White Spur/Stone Creek drainage system were a continuation of a project which began with the construction of the emergency outlet, a commenced conversion exemption would be inappropriate. There was no project drainage plan setting forth in detail the drainage entailed by the White Spur/Stone Creek project. Moreover, there was no contract to construct the White Spur/Stone Creek portion of the drainage system prior to December 23, 1985. In a closely analogous situation, North Dakota Notice 6-CP-32, Situation No. 5, indicates that an exemption is unjustified. A copy of the notice is attached as Exhibit K.

In conclusion, DASCO considered this project in April of 1987, and decided that a commenced determination was inappropriate.

Although the facts of the case have not changed, the Bottineau County ASCS committee reconsidered the matter on September 29, 1988, and granted a blanket exemption to the entire White Spur/Stone Creek assessment area. The exemption was not justified in 1987, and it is not justified today. The Bottineau County ASCS committee's determination is inconsistent with both the letter and the spirit of the Swampbuster legislation. Although commenced conversion exemptions are appropriate in those situations where a producer expends significant funds in reasonable reliance upon former drainage laws, the White Spur/Stone Creek drainage project was in the conceptual stage when the Swampbuster provisions were passed. It is now two and one-half years since the passage of that legislation and the project is still in the planning phase. Under these circumstances, neither the law nor equitable considerations justifies an exemption. The National Wildlife Federation therefore urges you to rectify the situation and reverse the decision of the Bottineau County ASCS committee. We respectfully request that you render a decision on this matter within 45 days so that alternative avenues of redress can be considered if necessary.

Thank you for your consideration.

Sincerely yours,

Anthony N. Turrini

Anthony N. Turrini
Legal Counsel

Attachments (11)

xc: Ronald Deraas, Bottineau County Executive Director, ASCS (w/o attachments)
Cliff Issendorf, Chairman, Bottineau County Water Resource District (w/o attachments)
Murray Sagsveen, Attorney, Bottineau County Water Resource District (w/o attachments)
Lloyd Jones, U.S. Fish and Wildlife Service (w/o attachments)
Bill Berg, J.Clark Salyer NWR (w/o attachments)
Mike McKenna, ND Game & Fish Department (w/o attachments)

Robert Christman
Jan Goldman-Carter
Tim Taylor

ited States
epartment of
Agriculture

Agricultural
Stabilization and
Conservation Service

P.O. Box 2415
Washington, D.C.
20013

ATTACHMENT B

MAR 30 1989

To: SED, Minnesota State ASCS Office

Date:
In Reply Refer to:

From: William Penn
Deputy Administrator, State and County Operations
ACTING

Subject: Appeal For Reconsideration of Yellow Medicine River Watershed District Ditch 18 - Commenced Determination

Our August 17, 1988, memorandum which reversed the Minnesota State ASC Committee's decision granting a commenced determination to the Yellow Medicine River Watershed District Ditch Number 18 (Ditch 18) remains unchanged.

While Ditch 18 is ineligible for a commenced determination, we have determined relief shall be granted to those producers who took actions or allowed actions to be taken on their behalf to drain specific wetlands on the basis of the Minnesota State Committee's May 18, 1987, commenced determination. However, only those wetlands upon which action was taken between May 18, 1987, and August 17, 1987, will qualify for relief.

The STC shall immediately consult with SCS and the U.S. Fish and Wildlife Service in determining the wetlands upon which action was taken between May 18, 1987, and August 17, 1987.

SCS will identify the affected wetlands on the aerial photography. Any draining of additional wetlands will be considered swampbusting.

Immediately notify the Yellow Medicine CDC of this determination.

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PAGE 1 OF 1
MJ DATE 5/30/89
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ASCS-284-1

Minnesota State CattleWomen, recently presented a copy [illegible]
principal of Madison Elementary School. A copy of this videotape and acco[illegible]
ity kit has been given to all elementary s
Minnesota CattleWomen. The "Growt
designed and developed by teachers in
fleWomen's Association. Throughout
range of learning skills including
parison, contrast, analysis, evaluatio
be integrated into the following sch
reading, state history (geography,
cultural awareness), career educat
work well outside the classroom, to

THE WESTERN GUARD, MADISON, MINNESOTA
[illegible]y, April 5, 1989 Page 9

Minnesotans Helping Minnesotans

Volunteer Recognition Week
April 9-15, 1989

Volunteer Recognition Week, April 9-15 is a week specifically set aside to acknowledge and thank volunteers. This year's theme is "Minnesotans Helping Minnesotans." A second theme being used this year is "Young Minnesotans Helping Minnesotans" focusing on youth community service and the contributions young volunteers are making.

Here are some facts about volunteers:

1. An estimated 1.6 million Minnesotans volunteer, according to the Minnesota Office on Volunteer Services (MOVS) Department of Administration.
2. The value of volunteer contributions in Minnesota is estimated at $2.8 billion annually.
3. The majority of people who are employed still find time to volunteer.
4. One-third of all senior citizens volunteer.
5. One out of every two teenagers volunteer.

Recognition and thanks should be given to individual volunteers involved in all kinds of volunteer activities.

Minnesota's good fortune depends on "Minnesotans Helping Minnesotans" and "Young Minnesotans Helping Minnesotans."

EPA Gives Orders To Repair Wetlands

U.S. Environmental Protection Agency (EPA) Region 5 Water Division Director Charles H. Sutfin today announced the issuance of administrator orders to Lac qui Parle County Commissioners, a Madison engineering company, and three area farmers. The order demands the restoration of a wetland area filled without authorization when the farmers enlargened County Ditch No. 17, a drainage ditch that services their individual farms.

The farmers are Myron Halvorson, Werner Goerke, and Alyce Olson, all of Lac qui Parle County. A separate order was issued to Lac qui Parle County commissioners and the Ted Chamberlin Engineering Company, Madison.

According to the EPA order, the county commissioners, Chamberlin, and the farmers knowingly violated Section 404 of the Clean Water Act, which requires that a permit be issued by the U.S. Army Corps of Engineers before filling wetland areas.

"All of the parties involved knew full well that a permit had to be obtained," Sutfin said. "They chose not to obey the law. Unfortunately, at least 150 acres of wetland have been adversely affected by this irresponsible behavior. This action - one of the first in the nation against farmers - should send a clear warning to farmers across the region: Wetlands are valuable environmental ecosystems and EPA will not tolerate their unauthorized destruction."

Upon receiving the order, Lac qui Parle County commissioners, Chamberlin, and the three farmers have 5 days to respond to EPA.

Wetlands include marshes, swamps, bogs, and similar areas between water and dry land. Wetlands harbor unique soils and plants that provide food and habitat for fish and wildlife, erosion control, flood control, and recreation. Some 458,000 of acres of wetlands are destroyed in the United States each year. Less than half of the wetlands that once existed in the United States remain.

The EPA and the U.S. Army Corps of Engineers are working to ensure compliance with Section 404 of the Clean Water Act. The 1987 amendments to the Clean Water Act grant EPA the authority to assess administrative penalties up to $25,000 per day for each violation, not to exceed $125,000 for each violation. For several violations, EPA may refer cases to the U.S. Department of Justice, for greater penalties or criminal prosecution.

ATTACHMENT C

SOD/SWAMP CUMULATIVE DATA REPORT

JANUARY AND FEBRUARY

FOR FURTHER INFORMATION CONTACT

SANDY SMITH

ASCS-CGRD-COMPLIANCE SECTION

447-3472

CUMULATIVE SODBUSTER AND SWAMPBUSTER COMPLIANCE DATA SINCE INCEPTION

JANUARY AND FEBRUARY

Number of:

SODBUSTER

1	Producers determined ineligible for program benefits because of sodbuster compliance	494
2	Appeals received	367
3	Appeals approved	315
4	Appeals not approved	19
5	Appeals pending	33

SWAMPBUSTER

6	Producers determined ineligible for program benefits because of swampbuster compliance	345
7	Appeals received	337
8	Appeals approved	206
9	Appeals not approved	71
10	Appeals pending	60
*11	Commenced determination requests received	4,520
*12	Commenced determination requests approved	2,032
13	Commenced determination requests not approved	379
14	Commenced determination requests pending	2,113

Dollar amount of benefits lost by producers relating to:

15	Ineligibility because of sodbuster compliance	$1,005,108.85
*16	Ineligibility because of swampbuster compliance	$239,358.55

NUMBERS CORRESPOND WITH COLUMNS ON PAGES 1 AND 2

* Correction from previous report.

NOTE: A dollar figure cannot be established for program benefits lost under the price support program.

3/2/89

SOD/SWAMP DATA REPORT
JANUARY AND FEBRUARY

ST	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
PA	16	1	0	0	3	1	0	0	0	0	0	0	0	0	$31,324.00	$5,000.00
MD	2	0	0	0	0	0	0	0	0	0	6	5	1	0	$338.39	$0.00
DE	0	0	0	0	0	0	0	0	0	0	15	1	0	14	$0.00	$0.00
WV	2	0	0	0	0	0	0	0	0	0	3	1	0	2	$1,576.00	$0.00
NJ	0	0	0	0	0	0	0	0	0	0	3	3	0	3	$0.00	$0.00
NY	1	0	0	0	0	4	4	0	2	2	121	81	11	29	$1,900.00	$21,196.00
CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
RI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
VT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
ME	0	0	0	0	0	0	0	0	0	0	1	1	0	0	$0.00	$0.00
MA	0	0	0	0	0	0	0	0	0	0	3	3	0	0	$0.00	$0.00
NEA	21	1	0	0	3	5	4	0	2	2	152	95	12	48	$35,138.39	$26,196.00
VA	7	0	0	0	0	0	0	0	0	0	16	6	0	10	$98.39	$0.00
NC	27	9	9	0	0	5	5	2	2	1	549	441	44	64	$5,875.54	$0.00
SC	0	0	0	0	0	0	0	0	0	0	21	7	0	14	$0.00	$0.00
GA	1	1	1	0	0	0	0	0	0	0	78	57	4	17	$0.00	$0.00
FL	0	0	0	0	0	0	0	0	0	0	1	0	0	1	$0.00	$0.00
AL	1	0	0	0	0	0	0	0	0	0	5	5	0	0	$1,056.00	$0.00
TN	2	0	0	0	0	0	0	0	0	0	20	8	1	11	$0.00	$0.00
KY	23	11	11	0	0	0	0	0	0	0	54	38	2	14	$300.00	$0.00
MS	12	1	1	0	0	2	2	2	0	0	14	9	1	4	$49,228.00	$13,576.00
AR	2	0	0	0	0	2	2	1	0	1	19	14	0	5	$6,000.00	$0.00
LA	1	0	0	0	0	0	0	0	0	0	15	15	0	0	$2,459.49	$0.00
FR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SEA	76	22	22	0	0	9	9	5	2	2	792	600	52	140	$65,017.42	$13,576.00
TX	9	4	2	0	2	3	3	3	0	0	110	13	0	98	$45,000.00	$0.00
OK	3	2	1	0	1	0	0	0	0	0	9	2	0	7	$11,680.20	$0.00
KS	14	7	5	2	0	3	2	2	0	0	64	14	3	47	$63,037.70	$0.00
CO	4	2	0	2	0	0	0	0	0	0	1	0	0	1	$113,010.50	$0.00
NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
UT	1	1	0	0	1	0	0	0	0	0	0	0	0	0	$431.00	$0.00
AZ	8	8	8	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
CA	1	0	0	0	0	1	1	0	0	1	2	1	1	0	$2,239.00	$3,500.00
HI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SWA	40	24	16	4	4	7	6	5	0	1	186	30	4	153	$235,398.40	$3,500.00

SOD/SWAMP DATA REPORT
JANUARY AND FEBRUARY

ST	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
AK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
WA	12	2	2	0	0	4	4	4	0	0	0	0	0	0	$0.00	$0.00
OR	4	4	2	0	2	0	0	0	0	0	15	11	2	2	$25,141.00	$0.00
ID	0	0	0	0	0	0	0	0	0	0	25	25	0	0	$0.00	$0.00
MT	5	4	3	1	0	1	1	1	0	0	4	4	0	0	$2,049.46	$0.00
WY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
ND	3	1	1	0	0	0	0	0	0	0	504	222	28	254	$9,264.00	$0.00
SD	7	7	6	1	0	17	16	2	12	2	21	16	1	4	$0.00	$8,217.00
NE	66	65	58	5	2	6	6	5	1	0	108	98	6	4	$119,826.34	$0.00
NWA	97	83	72	7	4	28	27	12	13	2	677	376	37	264	$156,280.80	$8,217.00
MN	16	16	7	2	7	222	222	147	45	30	739	381	162	196	$100,593.81	$282,164.54
IA	145	145	138	1	6	7	7	3	0	4	1,174	32	6	1,136	$371,408.60	$42,782.00
MO	24	23	21	0	2	1	1	0	0	1	33	23	4	6	$128.00	$0.00
WI	13	9	7	1	1	35	30	10	5	15	149	63	41	45	$23,080.00	$194,444.00
IL	12	5	1	2	0	11	11	6	3	2	75	45	13	17	$7,376.03	$140,715.00
IN	39	39	31	2	6	6	6	4	1	1	182	114	30	38	$9,772.00	$20,105.01
MI	0	0	0	0	0	9	9	9	0	0	302	224	17	61	$0.00	$0.00
OH	11	0	0	0	0	5	5	5	0	0	59	49	1	9	$915.40	$7,659.00
MWA	260	237	205	8	22	296	291	184	54	53	2,713	931	274	1,508	$513,273.84	$687,869.55
TOTAL	494	367	315	19	33	345	337	206	71	60	4,520	2,032	379	2,113	$1,005,108.85	$739,358.55

SOD/STAMP CUMULATIVE DATA REPORT
FOR NOVEMBER AND DECEMBER

FOR FURTHER INFORMATION CONTACT

SANDY SMITH

ASCS-CGRD-COMPLIANCE SECTION

447-3472

CUMULATIVE SODBUSTER AND SWAMPBUSTER COMPLIANCE DATA SINCE INCEPTION

NOVEMBER AND DECEMBER

Number of:

SODBUSTER

1	Producers determined ineligible for program benefits because of sodbuster compliance	333
2	Appeals received	256
3	Appeals approved	199
4	Appeals not approved	17
5	Appeals pending	40

SWAMPBUSTER

6	Producers determined ineligible for program benefits because of swampbuster compliance	343
7	Appeals received	337
8	Appeals approved	179
9	Appeals not approved	87
10	Appeals pending	71
11	Commenced determination requests received	5,460
12	Commenced determination requests approved	2,863
13	Commenced determination requests not approved	360
14	Commenced determination requests pending	2,237

Dollar amount of benefits lost by producers relating to:

15	Ineligibility because of sodbuster compliance	$682,623.98
16	Ineligibility because of swampbuster compliance	$544,177.00

* NUMBERS CORRESPOND WITH COLUMNS ON PAGES 1 AND 2*

1-10-89

SOD/SWAMP DATA REPORT
NOVEMBER/DECEMBER

ST	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
PA	11	1	0	0	1	2	0	0	0	0	0	0	0	0	$28,133.76	$0.00
MD	1	0	0	0	0	0	0	0	0	0	9	8	1	0	$338.39	$0.00
DE	0	0	0	0	0	0	0	0	0	0	15	1	0	14	$0.00	$0.00
WV	1	0	0	0	0	0	0	0	0	0	3	0	0	3	$780.00	$0.00
NJ	0	0	0	0	0	0	0	0	0	0	3	3	0	0	$0.00	$0.00
NY	1	0	0	0	0	3	1	0	0	1	97	77	11	9	$1,900.00	$21,196.00
CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
RI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
VT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
ME	0	0	0	0	0	0	0	0	0	0	1	1	0	0	$0.00	$0.00
MA	0	0	0	0	0	0	0	0	0	0	3	3	0	0	$0.00	$0.00
NEA	14	1	0	0	1	5	1	0	0	1	131	93	12	26	$31,141.15	$21,196.00
VA	5	0	0	0	0	0	0	0	0	0	16	6	0	10	$0.00	$0.00
NC	20	4	4	0	0	12	12	2	4	6	518	390	36	92	$4,464.90	$710.64
SC	0	0	0	0	0	0	0	0	0	0	21	7	0	14	$0.00	$0.00
GA	1	1	1	0	0	1	1	1	0	0	71	49	4	18	$0.00	$0.00
FL	0	0	0	0	0	0	0	0	0	0	8	7	0	1	$0.00	$0.00
AL	0	0	0	0	0	0	0	0	0	0	6	4	0	2	$0.00	$0.00
TN	2	0	0	0	0	0	0	0	0	0	15	5	1	9	$0.00	$0.00
KY	11	11	11	0	0	1	0	0	0	0	53	36	8	9	$300.00	$0.00
MS	2	0	0	0	0	1	0	0	0	0	14	9	1	4	$3,652.00	$0.00
AR	3	0	0	0	0	3	2	0	0	3	33	13	0	19	$6,000.00	$0.00
LA	1	0	0	0	0	0	0	0	0	0	15	15	0	0	$2,459.49	$0.00
PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SEA	44	16	16	0	0	17	15	3	4	8	769	541	50	178	$16,876.39	$710.64
TX	0	4	2	0	2	3	3	3	0	0	107	9	0	98	$45,000.00	$0.00
OK	3	2	1	0	1	0	0	0	0	0	9	2	0	7	$11,680.20	$0.00
KS	13	6	4	2	0	3	3	2	0	1	84	37	3	44	$69,068.00	$0.00
CO	3	1	0	1	0	0	0	0	0	0	2	0	0	2	$113,010.50	$0.00
NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
AZ	8	7	7	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
CA	1	0	0	0	0	0	0	0	0	0	2	1	1	0	$2,339.00	$0.00
HI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SWA	36	20	14	3	3	6	6	5	0	1	204	49	4	151	$240,997.70	$0.00

SOD/SWAMP DATA REPORT
NOVEMBER/DECEMBER

ST	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
AK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
WA	12	3	2	0	0	6	6	2	4	0	0	0	0	0	$0.00	$9,185.00
OR	1	1	1	0	0	0	0	0	0	0	14	10	2	2	$35,141.00	$0.00
ID	0	1	1	0	0	0	0	0	0	0	22	22	0	0	$0.00	$0.00
MT	4	3	2	1	0	1	1	0	0	1	2	0	0	2	$2,049.46	$0.00
WY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
ND	3	1	1	0	0	0	0	0	0	0	374	215	29	130	$9,264.00	$0.00
SD	7	7	6	1	0	8	8	3	2	3	21	13	1	7	$0.00	$8,317.00
NE	68	68	57	2	9	11	11	7	4	0	1,174	1,051	9	114	$112,705.49	$0.00
NWA	95	83	70	4	9	26	26	12	10	4	1,607	1,311	41	255	$149,159.95	$166,561.95
MN	13	13	6	2	5	215	215	121	61	33	817	405	164	248	$94,093.00	$225,052.00
IA	37	37	30	0	7	7	7	3	0	4	1,172	39	5	1,128	$141,131.39	$42,782.00
MO	23	23	18	1	4	1	1	0	0	1	34	21	8	5	$3,210.00	$0.00
WI	6	6	4	0	3	25	25	7	6	12	153	66	25	62	$3,197.00	$49,216.21
IL	3	2	1	1	0	12	12	5	1	6	74	43	11	20	$1,902.00	$0.00
IN	49	49	36	6	7	9	9	5	3	1	102	96	25	61	$0.00	$30,199.20
MI	6	6	4	0	2	15	15	13	2	0	260	160	14	86	$0.00	$0.00
OH	9	0	0	0	0	5	5	5	0	0	57	39	1	17	$915.40	$7,659.00
MWA	146	136	99	10	27	289	289	159	73	57	2,749	869	253	1,627	$244,448.79	$355,708.41
TOTAL	335	256	199	17	40	343	337	179	87	71	5,460	2,863	360	2,237	$682,633.90	$544,177.00

SOD/SWAMP CUMULATIVE DATA REPORT

FOR THE MONTH OF OCTOBER

FOR FURTHER INFORMATION CONTACT

SANDY SMITH

ASCS-CGRD-COMPLIANCE SECTION

447-3472

CUMULATIVE SODBUSTER AND SWAMPBUSTER COMPLIANCE DATA SINCE INCEPTION
FOR THE MONTH OF OCTOBER

Number of:

SODBUSTER

1	Producers determined ineligible for program benefits because of sodbuster compliance	317
2	Appeals received	230
3	Appeals approved	156
4	Appeals not approved	21
5	Appeals pending	53

SWAMPBUSTER

6	Producers determined ineligible for program benefits because of swampbuster compliance	332
7	Appeals received	327
8	Appeals approved	190
9	Appeals not approved	56
10	Appeals pending	81
11	Commenced determination requests received	4,663
12	Commenced determination requests approved	2,487
13	Commenced determination requests not approved	283
14	Commenced determination requests pending	1,893

Dollar amount of benefits lost by producers relating to:

15	Ineligibility because of sodbuster compliance	$649,190.90
16	Ineligibility because of swampbuster compliance	$781,166.02

* NUMBERS CORRESPOND WITH COLUMNS ON PAGES 1 AND 2*

SOD/SWAMP DATA REPORT
FOR THE MONTH OF OCTOBER

ST	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
PA	10	1	0	0	1	1	0	0	0	0	0	0	0	0	$1,241.00	$0.00
MD	1	0	0	0	0	0	0	0	0	0	9	6	1	2	$338.39	$0.00
DE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
WV	1	0	0	0	0	0	0	0	0	0	3	0	0	3	$780.00	$0.00
*NJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NY	1	0	0	0	0	3	1	0	0	1	93	48	10	35	$1,900.00	$21,196.00
CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
RI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
VT	0	0	0	0	0	0	0	0	0	0	2	2	0	0	$0.00	$0.00
NH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
ME	0	0	0	0	0	0	0	0	0	0	1	1	0	0	$0.00	$0.00
MA	0	0	0	0	0	0	0	0	0	0	3	2	0	1	$0.00	$0.00
NEA	13	1	0	0	1	4	1	0	0	1	111	59	11	41	$4,259.39	$21,196.00
VA	5	0	0	0	0	0	0	0	0	0	12	0	0	12	$0.00	$0.00
NC	15	4	4	0	0	11	11	2	2	7	486	303	18	165	$3,093.54	$0.00
SC	0	0	0	0	0	0	0	0	0	0	42	5	0	37	$0.00	$0.00
GA	1	1	1	0	0	1	1	0	1	0	35	15	1	19	$0.00	$0.00
FL	0	0	0	0	0	0	0	0	0	0	8	7	0	1	$0.00	$0.00
AL	0	0	0	0	0	0	0	0	0	0	7	2	0	5	$0.00	$0.00
*TN	2	0	0	0	0	0	0	0	0	0	15	5	0	10	$0.00	$0.00
KY	13	7	6	0	1	1	0	0	0	0	44	24	6	14	$300.00	$0.00
MS	2	0	0	0	0	0	0	0	0	0	13	6	2	5	$3,652.00	$0.00
AR	2	0	0	0	0	2	2	0	0	2	19	8	0	11	$6,000.00	$0.00
LA	1	0	0	0	0	0	0	0	0	0	16	16	0	0	$2,459.49	$0.00
PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SEA	41	12	11	0	1	15	14	2	3	9	697	391	27	279	$15,505.03	$0.00
TX	2	0	0	0	0	1	1	1	0	0	8	0	0	8	$15,000.00	$0.00
OK	4	2	1	0	1	0	0	0	0	0	9	0	0	9	$11,680.20	$0.00
KS	12	1	0	1	0	3	3	1	1	0	57	7	3	47	$51,466.19	$21,267.00
CO	2	0	0	0	0	0	0	0	0	0	2	2	0	0	$54,416.09	$0.00
NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
AZ	8	8	7	1	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
CA	1	0	0	0	0	0	0	0	0	0	1	1	0	0	$2,239.00	$0.00
HI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SWA	29	11	8	2	1	4	3	2	1	0	77	10	3	64	$134,801.48	$21,267.00

*CORRECTION PER STATE OFFICE

SOD/SWAMP DATA REPORT
FOR THE MONTH OF OCTOBER

AK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00	
WA	12	2	2	0	0	6	6	0	0	6	0	0	0	0	$0.00	$94,834.00	
OR	1	1	1	0	0	0	0	0	0	0	16	13	0	3	$0.00	$0.00	
ID	1	1	1	0	0	0	0	0	0	0	22	22	0	0	$0.00	$0.00	
MT	4	3	2	1	0	1	1	0	0	1	2	0	0	2	$2,049.46	$0.00	
WY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00	
☆ND	1	0	0	0	0	0	0	0	0	0	290	166	9	115	$2,213.00	$0.00	
SD	6	6	5	1	0	14	14	4	2	8	22	9	1	12	$0.00	$0.00	
NE	54	54	18	2	34	12	12	7	4	1	1,175	1,045	5	125	$201,224.78	$0.00	
NWA	79	67	29	4	34	33	33	11	6	16	1,527	1,255	15	257	$205,487.24	$300,321.24	
MN	8	8	4	1	3	200	200	139	33	28	922	408	161	353	$113,944.71	$372,102.58	
IA	31	28	21	4	3	6	6	3	2	1	588	10	3	575	$155,204.65	$45,085.00	
MO	17	13	10	2	1	1	1	0	0	1	34	16	4	14	$14,468.00	$0.00	
WI	5	5	4	0	1	35	35	7	3	15	158	53	15	90	$0.00	$895.00	
IL	33	33	31	2	0	16	16	6	2	8	78	30	12	36	$1,902.00	$0.00	
IN	46	46	34	6	6	9	9	5	3	1	172	89	21	62	$2,703.00	$20,199.30	
MI	6	6	4	0	2	15	15	12	2	1	249	141	11	97	$0.00	$0.00	
OH	9	0	0	0	0	4	4	3	1	0	50	25	0	25	$915.40	$100.00	
MWA	155	139	108	15	16	276	276	175	46	55	2,251	772	227	1,252	$289,137.76	$438,381.78	
TOTAL	317	230	156	21	53	332	327	190	56	81	4,663	2,487	283	1,893	$649,190.90	$781,166.02	

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Stabilization and Conservation Service
P.O. Box 2415
Washington, DC 20013

NOTICE CP-351

FOR: State and County Offices

REQUESTING DATA ON SODBUSTER AND SWAMPBUSTER COMPLIANCE

Approved By: Acting Deputy Administrator, State and County Operations

1 PURPOSE

A This notice:

1 Provides further clarification of information needed on sodbuster and swampbuster compliance for the 1987 and 1988 program years.

2 Informs County Offices that they are required to review, complete, and send the Cumulative Sodbuster and Swampbuster Compliance Data Since Inception Report (PA-108R) to the State Office by the first of each month.

B It is vital that this information be accurate, because it is being disseminated to other USDA agencies, Congress, media, and other Government Agencies.

2 COUNTY OFFICE ACTION

County Offices shall:

A Review copy of PA-108R in Exhibit 1.

B Complete PA-108R's.

C Send requested PA-108R's to the State Office by the first of each month.

3 STATE OFFICE ACTION

State Offices shall:

A Summarize PA-108R's received from County Offices.

B Send PA-108R's to CGRD, Compliance Section through the Area Office by the tenth of each month.

DISPOSAL	DISTRIBUTION
July 1, 1989	AA; AN; FAX; States relay to Counties

NOTICE CP-351 EXHIBIT 1

STATE _____ FOR THE MONTH OF _____

Report No. PA-108R

CUMULATIVE SODBUSTER AND SWAMPBUSTER COMPLIANCE DATA SINCE INCEPTION REPORT

1 SODBUSTER

A Number of producers notified that they were ineligible for program benefits because of sodbuster compliance. _____

B Of the producers notified of ineligibility:

1 How many filed an appeal? _____

2 How many appeals were approved? _____

3 How many appeals were not approved? _____

4 How many appeals are pending? _____

C The sum of B2 through B4 should equal item B1.

D Dollar amount of program payments denied producers that were determined ineligible (producer benefits lost in item A minus producer benefits approved in item B2). $_____

2 SWAMPBUSTER

A Number of producers notified that they were ineligible for program benefits because of swampbuster compliance. _____

B Of the producers notified of ineligibility:

1 How many filed an appeal? _____

2 How many appeals were approved? _____

3 How many appeals were not approved? _____

4 How many appeals are pending? _____

C The sum of items B2 through B4 should equal item B1.

D Dollar amount of program payments denied producers that were determined ineligible (producer benefits lost in item A minus producer benefits approved in item B2). $_____

NOTICE CP-351 EXHIBIT 1

3 COMMENCED

A Commenced is defined as the conversion of a wetland begun before December 23, 1985. Approval of a commenced determination request would permit the completion of the conversion.

1 Number of requests received. _____

2 How many were approved? _____

3 How many were not approved? _____

4 How many are pending? _____

B The sum of items A2 through A4 should equal item A1. _____

SOD/SWAMP CUMULATIVE DATA REPORT

FOR THE MONTH OF SEPTEMBER

FOR FURTHER INFORMATION CONTACT

SANDY SMITH

ASCS-CGRD-COMPLIANCE SECTION

447-3472

CUMULATIVE SODBUSTER AND SWAMPBUSTER COMPLIANCE DATA SINCE INCEPTION

FOR THE MONTH OF SEPTEMBER

Number of:

SODBUSTER

1	Producers determined ineligible for program benefits because of sodbuster compliance	[illegible]
2	Appeals received	220
3	Appeals approved	183
4	Appeals not approved	37
5	Appeals pending	34

SWAMPBUSTER

6	Producers determined ineligible for program benefits because of swampbuster compliance	207
7	Appeals received	171
8	Appeals approved	121
9	Appeals not approved	43
10	Appeals pending	43
11	Commenced determination requests received	3,403
12	Commenced determination requests approved	2,491
13	Commenced determination requests not approved	249
14	Commenced determination requests pending	663

Dollar amount of benefits lost by producers relating to:

15	Ineligibility because of sodbuster compliance	$52,525.5
16	Ineligibility because of swampbuster compliance	$33,893.7

* NUMBERS CORRESPOND WITH COLUMNS ON PAGES 1 AND 2*

FOR THE MONTH OF SEPTEMBER

ST	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
PA	10	1	0	0	1	1	0	0	0	0	0	0	0	0	$1,241.00	$0.00
MD	1	0	0	0	0	1	0	0	0	0	74	53	1	20	$0.00	$0.00
DE	0	0	0	0	0	0	0	0	0	0	1	1	0	0	$0.00	$0.00
WV	1	0	0	0	0	0	0	0	0	0	0	0	0	0	$780.00	$0.00
NJ	0	0	0	0	0	4	4	3	0	1	2	2	0	0	$0.00	$0.00
NY	1	0	0	0	0	3	1	0	0	1	69	38	14	17	$1,900.00	$21,196.00
CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
RI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
VT	0	0	0	0	0	0	0	0	0	0	2	2	0	0	$0.00	$0.00
NH	0	0	0	0	0	0	0	0	0	0	1	1	0	0	$0.00	$0.00
ME	0	0	0	0	0	0	0	0	0	0	1	1	0	0	$0.00	$0.00
MA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NEA	13	1	0	0	1	9	5	3	0	3	150	98	15	37	$3,921.00	$21,196.00
VA	2	0	0	0	0	0	0	0	0	0	5	1	0	4	$98.39	$0.00
NC	8	4	4	0	0	5	5	1	4	0	434	308	22	94	$3,093.54	$0.00
SC	0	0	0	0	0	0	0	0	0	0	8	4	0	4	$0.00	$0.00
GA	1	1	1	0	0	1	1	0	1	0	35	15	1	19	$0.00	$0.00
FL	0	0	0	0	0	0	0	0	0	0	8	7	0	1	$0.00	$0.00
AL	0	0	0	0	0	0	0	0	0	0	4	1	0	3	$0.00	$0.00
TN	3	0	0	0	0	2	2	0	0	2	111	106	0	5	$0.00	$0.00
KY	13	7	6	0	1	1	0	0	0	0	44	24	6	14	$300.00	$0.00
MS	2	2	0	0	2	0	0	0	0	0	9	6	1	2	$3,652.00	$0.00
AR	2	0	0	0	0	2	2	0	0	2	11	6	0	5	$6,000.00	$0.00
LA	1	0	0	0	0	0	0	0	0	0	16	16	0	0	$2,459.49	$0.00
PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SEA	31	14	11	0	3	11	10	1	5	4	675	494	30	151	$15,603.42	$0.00
TX	4	4	2	0	2	0	0	0	0	0	13	0	0	13	$15,000.00	$0.00
OK	3	2	1	0	1	0	0	0	0	0	1	0	0	1	$11,680.20	$0.00
KS	7	1	0	0	1	3	2	0	2	0	40	27	1	12	$38,729.19	$21,367.00
CO	1	0	0	0	0	0	0	0	0	0	2	2	0	0	$176.09	$0.00
NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
UT	1	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
AZ	8	8	8	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
NE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
CA	1	0	0	0	0	0	0	0	0	0	1	1	0	0	$2,239.00	$0.00
HI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
SWA	25	15	11	0	4	3	2	0	2	0	57	30	1	26	$67,824.48	$21,367.00

SOD/SWAMP DATA REPORT
FOR THE MONTH OF SEPTEMBER

ST	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
AR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
WA	12	2	2	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
OR	2	2	2	0	0	0	0	0	0	0	12	12	0	0	$0.00	$0.00
ID	4	3	3	1	0	0	0	0	0	0	22	23	0	0	$0.00	$0.00
MT	1	0	0	0	0	0	0	0	0	0	0	0	0	0	$715.18	$0.00
WY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0.00	$0.00
ND	2	1	1	0	0	27	27	21	6	0	253	173	15	66	$2,213.00	$0.00
SD	4	1	0	1	0	7	7	3	3	1	28	16	9	3	$0.00	$23,197.00
NE	55	55	50	3	2	36	36	21	4	1	866	811	3	52	$92,485.93	$6,483.64
NWA	80	64	57	5	2	60	60	45	13	2	1,101	1,033	27	121	$95,414.11	$135,094.75
MN	19	19	13	1	6	58	58	24	12	22	768	463	135	170	$121,712.71	$210,186.02
IA	27	27	19	4	4	5	5	3	1	1	14	10	0	4	$134,936.46	$45,085.00
MO	13	13	7	0	6	5	5	3	0	2	21	11	6	4	$10,772.00	$0.00
WI	7	7	4	0	3	17	17	8	3	7	74	49	9	16	$3,395.00	$895.00
IL	3	3	1	2	0	13	13	5	1	7	54	38	6	30	$1,920.00	$0.00
IN	44	44	33	6	5	8	8	5	3	0	149	95	13	41	$6,171.00	$10,074.47
KY	4	4	4	0	0	14	14	11	3	1	234	162	7	65	$0.00	$0.00
OH	9	9	0	9	0	4	4	3	1	0	26	18	0	8	$915.40	$100.00
MWA	126	126	80	22	24	124	124	62	33	40	1,340	836	176	338	$369,822.57	$366,340.49
TOTAL	275	330	159	27	34	207	201	111	42	48	3,403	2,491	249	663	$452,585.58	$433,898.24

Rad Harpers Ferry 11/3/88

ASCS SWAMPBUSTER COMPLIANCE DATA
Through September 1988

	STATE	SWAMPBUSTED DETERMINED	APPEALS RECEIVED	APPEALS APPROVED	APPEALS DENIED	APPEALS PENDING	BENEFITS LOST
1	ARKANSAS	2	2	0	0	2	$0.00
2	GEORGIA	1	1	0	1	0	$0.00
3	ILLINOIS	13	13	5	1	7	$0.00
4	INDIANA	8	8	5	3	0	$10,074.47
5	IOWA	5	5	3	1	1	$45,085.00
6	KANSAS	3	2	0	2	0	$21,267.00
7	KENTUCKY	1	0	0	0	0	$0.00
8	MARYLAND	1	0	0	0	0	$0.00
9	MICHIGAN	14	14	11	2	1	$0.00
10	MINNESOTA	58	58	24	12	22	$210,186.02
11	MISSOURI	5	5	3	0	2	$0.00
12	NEBRASKA	26	26	21	4	1	$6,483.64
13	NEW JERSEY	4	4	3	0	1	$0.00
14	NEW YORK	3	1	0	0	1	$21,196.00
15	NORTH CAROLINA	5	5	1	4	0	$0.00
16	NORTH DAKOTA	27	27	21	6	0	($95,414.11)
17	OHIO	4	4	3	1	0	$100.00
18	PENNSYLVANIA	1	0	0	0	0	$0.00
19	SOUTH DAKOTA	7	7	3	3	1	$23,197.00
20	TENNESSEE	2	2	0	0	2	$0.00
21	WISCONSIN	17	17	8	2	7	$895.00
	TOTALS	207	201	111	42	48	$433,898.24

Read 11/3/88 at Harper Ferry.

ASCS COMMENCED DETERMINATIONS
Through September 1988

NO.	STATE	COMMENCED RECEIVED	COMMENCED APPROVED	COMMENCED DENIED	COMMENCED PENDING	PERCENT DENIED
1	ALABAMA	4	1	0	3	0.00
2	ARKANSAS	11	6	0	5	0.00
3	CALIFORNIA	1	1	0	0	0.00
4	COLORADO	2	2	0	0	0.00
5	DELAWARE	1	1	0	0	0.00
6	FLORIDA	8	7	0	1	0.00
7	GEORGIA	35	15	1	19	2.86
8	IDAHO	22	22	0	0	0.00
9	ILLINOIS	54	28	6	20	11.11
10	INDIANA	149	95	13	41	8.72
11	IOWA	14	10	0	4	0.00
12	KANSAS	40	27	1	12	2.50
13	KENTUCKY	44	24	6	14	13.64
14	LOUISIANA	16	16	0	0	0.00
15	MAINE	1	1	0	0	0.00
16	MARYLAND	74	53	1	20	1.35
17	MICHIGAN	234	162	7	65	2.99
18	MINNESOTA	768	463	135	170	17.58
19	MISSISSIPPI	9	6	1	2	11.11
20	MISSOURI	21	11	6	4	28.57
21	NEBRASKA	866	811	3	52	0.35
22	NEW HAMPSHIRE	1	1	0	0	0.00
23	NEW JERSEY	2	2	0	0	0.00
24	NEW YORK	69	38	14	17	20.29
25	NORTH CAROLINA	424	308	22	94	5.19
26	NORTH DAKOTA	253	172	15	66	5.93
27	OHIO	26	18	0	8	0.00
28	OKLAHOMA	1	0	0	1	0.00
29	OREGON	12	12	0	0	0.00
30	SOUTH CAROLINA	8	4	0	4	0.00
31	SOUTH DAKOTA	28	16	9	3	32.14
32	TENNESSEE	111	106	0	5	0.00
33	TEXAS	13	0	0	13	0.00
34	VERMONT	2	2	0	0	0.00
35	VIRGINIA	5	1	0	4	0.00
36	WISCONSIN	74	49	9	16	12.16
	TOTAL	3403	2491	249	663	7.31

ATTACHMENT D

SWAMPBUSTER IMPLEMENTATION

Comparative Analysis *
(National Figures)

	SEP	OCT	NOV/DEC	JAN/FEB
Producers Ineligible	207	332	343	345
Appeals	201	327	337	337
Appeals Approved	111	190	179	206
Appeals Not Approved	42	56	87	71
Appeals Pending	48	81	71	60
Commenced Determinations	3403	4663	5460	4520
Commencement Approved	2491	2487	2863	2032
Commencement Not Approved	249	283	360	379
Commencement Pending	663	1893	2237	2113
$ Amount Withheld	$433,898.00	$781,166.02	$395,017.05	$739,358.55

* All information compiled from ASCS cumulative Sodbuster and Swampbuster compliance data since inception

ATTACHMENT E

SWAMPBUSTER IMPLEMENTATION
Comparative Analysis *
(Minnesota)

	SEP	OCT	NOV/DEC	JAN/FEB
Producers Ineligible	58	200	215	222
Appeals	58	200	215	222
Appeals Approved	24	139	121	147
Appeals Not Approved	12	33	61	45
Appeals Pending	22	28	33	30
Commenced Determinations	768	922	817	739
Commencement Approved	463	408	405	381
Commencement Not Approved	135	161	164	162
Commencement Pending	170	353	248	196
$ Amount Withheld	$210,186.02	$372,102.58	$235,852.00	$282,164.54

* All information compiled from ASCS cumulative Sodbuster and Swampbuster compliance data since inception

AMERICAN FARM BUREAU FEDERATION
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STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION
TO THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE
SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT
REGARDING WETLANDS PROTECTION AND AGRICULTURE

Presented by Mark A. Maslyn
Assistant Director, National Affairs Division

May 17, 1989

STATEMENT OF THE AMERICAN FARM BUREAU FEDERATION
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May 17, 1989

On behalf of the American Farm Bureau, I appreciate the opportunity to be here today to address the topic of wetlands protection and agriculture. Farm Bureau is the nation's largest general farm organization representing more than 3.6 million member families in 49 states and Puerto Rico. Our members produce virtually every agricultural commodity grown or raised commercially in the United States.

For several of those commodities, wetlands play a vital and intrinsic role in production. Cranberries, for example, so important to your district, Mr. Chairman, are a native wetland crop species. They require about 5 acres of support land that includes ponds, wetland reservoirs and uplands to support each acre of bog. Other crops such as rice, aquaculture and some types of timber also are closely linked to wetlands. Beyond that however, nearly every type of agriculture is affected by current wetlands protection laws and regulation, from "swampbuster" to Section 404 of the Clean Water Act, and a myriad of state and local regulations.

In any discussion about wetlands protection, it is helpful to remember that for much of our history, wetlands have been viewed as a problem to be eliminated rather than a resource to be protected. Under the first wetlands law in this country, the Federal Swamp and Land Act of 1849, the federal government gave wetlands away to individuals on the condition that they be drained and converted to something more useful. Wetlands have long been considered a source of disease and sickness, and their alterations were not merely condoned but encouraged.

Wetlands were altered for purposes that provided many benefits to society, including flood control, protection of public health, agricultural production, road construction and residential development. Much of the District of Columbia was once wetland, including the site of the Environmental Protection Agency.

Only recently has it been recognized that wetlands provide a valuable benefit in their natural state for such things as flood control, some groundwater recharge, wildlife habitat, fish spawning grounds and many other functions. With that recognition has come a slow shift in public attitudes toward wetlands protection.

However, this changing public attitude that views wetlands as a "public" resource to be protected, does not always mesh with the fact that most of these resources are on private lands. While many of

the benefits of wetlands protection accrue to someone other than the landowner, the cost and the burden of regulatory compliance falls to the landowner! From an agricultural perspective, one of the major shortcomings of current wetland protection efforts has been a failure to recognize and respect private property rights.

The preservation and/or creation of wetlands on private property often denies agricultural producers the opportunity to make economically viable use of some of his property. Wetlands preservation can prevent a producer from expanding profitable crop production or making needed improvements that would benefit other sectors of his operation. This restriction might very well rise to the level of a Fifth Amendment "taking" requiring just compensation, as recently construed by the Supreme Court.

Executive Order No. 12630 requires all executive agencies and departments--including EPA and the Corps of Engineers--to assess the impact of proposed actions and policies on the "takings" issue. Such consideration is certainly relevant to the wetlands issue. We urge the Committee to be fully satisfied that the relevant agencies have complied with the Executive Order and have performed the requisite takings analysis in any testimony or statement presented on the wetlands issue.

As this Committee prepares to examine the issue of wetlands protection, we would also urge that you look closely at the need for updated information and data on the rate of wetlands loss and the source of those alterations. There is a great deal of old data that is being referenced and used in a way that could shift the focus from solving the real problem, or result in unnecessary regulation of farmers and ranchers.

For example, an often used figure of wetlands alteration is 400,000 to 500,000 acres per year, the source of which is a 1983 Fish and Wildlife Service report. Yet it is our understanding that the data used in that report was collected in the 1950s and 1960s. Clearly, the information is dated and should be considered suspect for the purposes of making policy decisions in 1989. In contrast to the 1983 report, a 1984 study by the Office of Technology Assessment (OTA) estimated the annual alteration rate to be 275,000 acres. This is a very significant discrepancy, underscoring the need for current and reliable data.

It should also be noted that while agriculture has frequently been mentioned as a source of much of the annual wetlands alteration, neither of the reports mentioned above considers the effects of the "swampbuster" provisions of the 1985 farm bill. This provision, which makes anyone who converts wetlands to agricultural production ineligible for farm program benefits, is one of the most significant pieces of wetlands legislation ever. Yet our current information base, upon which many assumptions and policy decisions are being made, does not take into account the effects of this provision and the contribution from agriculture in stemming wetlands alteration. Once again, it points out the need for current and reliable information.

Let me briefly comment on some of the strengths and weaknesses of current wetlands policy from the perspective of farmers and ranchers. As mentioned earlier, many of the conflicts over wetlands protection can be traced to the issue of private property rights. Current regulatory programs such as Section 404 of the Clean Water Act are viewed as all stick and no carrot. They invite conflict over the question of private property rights and the right of an individual to secure the fullest and best use of his land. While some conflicts arise over plans to develop a parcel, more often the dispute is over normal farming activities that do not affect the wetland significantly. For example, there has been great variation among Corps of Engineer regional offices in their interpretation of what qualifies as exempt under "normal farming activities." We have seen examples where different regions would interpret the same activity in entirely opposite ways leading to confusion and skepticism.

Another frequent dispute is over the lack of consistent definitions and interpretations of what constitutes wetlands. These definitions vary not only among and within federal agencies, but at all levels of government.

Farmers and ranchers also need to have permit applications acted upon in a timely manner. For example, applications to perform streambank work that either protects farm and ranch land from flooding or streambanks from eroding have taken months for approval. The farmer is presented with a choice of doing nothing to protect his crop and land, or proceeding without a permit and risking fines and penalties.

Looking at "swampbuster," Farm Bureau supports legislation introduced by Congressman Dorgan, H.R. 1526. This bill modifies the "drop dead" provisions and brings penalties in line with the violations so that farmers will not lose all farm program benefits for minor infractions. The bill also clarifies the law's intent to exclude so called "nuisance" spots in the middle of a field that are wet for a short period of time.

Before concluding, we want to comment briefly on the National Wetlands Policy Forum to which Farm Bureau was a participant in the discussions. Many of the recommendations of the report are now surfacing in various legislative and regulatory proposals, such as the discussions on the 1990 farm bill and Representative Bennett's bill, H.R. 1746. While we cannot agree with all of the recommendations, in the report, there are several that we can support and others that we will be discussing with our members and elected leaders very soon. For example, we fully support the recommendation calling for a consistent definition of wetlands as well as efforts to reduce delays in the permit process. The Forum report also cautioned against modifying or weakening the existing permit exemptions for normal farming, silviculture and ranching operations. On that point, Farm Bureau believes that continuation of the existing 404 exemptions for agriculture should be one of the conditions that states must meet before responsibility for enforcing the 404 program can be transferred to the states.

The Forum also suggested that compatible economic uses of wetlands be encouraged rather than impeded. Such uses include timber harvesting, and the production of native wetland crops. Many of these types of agricultural activities can be conducted without significant loss of wetlands functions. Indeed, as you know firsthand, Mr. Chairman, cranberry production is responsible for maintaining, managing and expanding vast amounts of wetland and upland habitat in your district. We fully concur that these types of agriculture should be encouraged and that regulatory programs that restrict and impede these compatible uses be revised.

We are particularly encouraged that one of the major themes of the report was increasing the use of incentives, education and information to private landowners. The Forum realized that regulatory programs alone would not halt wetlands alteration. Instead, it emphasized increased economic incentives to landowners such as wetlands reserves, easements, and cost sharing for restoration. Mixing a few carrots with the regulatory stick makes good sense, and should promote cooperation rather than confrontation. In addition, increased information and education to wetlands owners on the significance of wetlands will promote public awareness and understanding.

In closing, we want to underscore the need to recognize that private property rights are a central issue in wetlands protection and the source of much of the conflict. We must reconcile the view held by some that wetlands are "public" resources with the fact that they are most often private property. Compensation, economic incentives, compatible uses, education and information are all tools that should be more fully utilized.

We appreciate the opportunity to be here and look forward to any questions you may have.

STATEMENT OF
RALPH E. HEIMLICH
ECONOMIC RESEARCH SERVICE, USDA
BEFORE THE
HOUSE SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT
MAY 17, 1989

Thank you Mr. Chairman, I appreciate the opportunity to discuss with the Subcommittee an evaluation of the swampbuster provision. My remarks concerning wetland conversion will focus on two areas: which areas of the country with high potential for conversion are most affected by agricultural programs and how changes in agricultural price incentives over time affect wetland conversion.

The swampbuster provision, Title XII Subtitle C. of the Food Security Act of 1985, was enacted to improve consistency between two goals: farm income and price support provisions and wetland conservation. Consistency would be improved by denying farm program benefits to producers who convert wetlands to agricultural production, but improved consistency may not insure that wetlands are protected from conversion. Conversion of wetlands to agricultural production was responsible for 87 percent of wetlands lost between the mid-1950's and mid-1970's. During the same period, cropland idled under farm programs averaged 9 percent of cropland used in the production of crops and government payments averaged 16 percent of net farm income. Although agricultural production accounted for the largest share of wetland loss, the swampbuster provision will only be effective where farmers' loss of benefits is sufficiently high to discourage conversion.

I have analyzed the extent to which denying farm program benefits under the swampbuster provision might influence owners of wetlands which are subject to conversion to agricultural production. Using data on the extent and location of wetlands, I identified 17 million acres of wetlands subject

to conversion to agricultural production out of the 78 million acres of rural nonfederal wetlands inventoried by the Soil Conservation Service. Wetlands subject to conversion include wetlands rated in 1982 as having high or medium potential for conversion and wetlands located in counties which experienced large percentage increases in land devoted to crop production between 1980 and 1984. The importance of government payments was measured by the ratio of direct government payments to net farm income in each county in 1984. Direct government payments included deficiency payments, CCC loans, and direct FmHA grants, but excluded crop insurance and subsidized loans. It was assumed that higher government payments would increase the effectiveness of the swampbuster provision because the potential loss of program benefits would be greater.

Only about a third of the wetlands subject to conversion to agricultural production (6 million acres) is located in counties where government payments were more than half of net farm income (table 1). Accordingly, swampbuster provisions will likely be highly effective in parts of the lower Mississippi bottomlands in Arkansas, some counties in the Southern Coastal Plain, part of Nebraska's Sand hills, and part of the Klamath Basin in Oregon (figure 1). Much of the Prairie pothole region of Minnesota and North Dakota is less dependent on government payments, but payments are sufficiently high that swampbuster provisions will probably be effective. Because of the crop mix and low program participation, the swampbuster provision will probably not affect wetland conversion in Florida, central Alabama, North and South Carolina's Pocosin wetlands, Wisconsin and upper Michigan, and coastal Massachusetts and Maine.

Improving agricultural prices over time would probably reduce the

effectiveness of the swampbuster provision. Farm program participation rises when agricultural commodity prices are low and market demand is weak and participation decreases when prices rise and demand is strong. Thus, the impact of the swampbuster provision is strongest when market incentives for crop production are weakest and diminishes when prices rise and farmers are most likely to develop new cropland.

Although direct government payments were 36 percent of net farm income in 1987 and 1988, payments were above 25 percent in only 7 years since 1960 (figure 2). Acreage idled under annual acreage reduction programs reached 22 percent of land used for crop production in 1987, but was less than 10 percent for 19 years since 1949. If the 1990's bring smaller global crop supplies, reduced stocks, and higher prices, the leverage farm program benefits exercise on wetland conversion during the 1980's is likely to decrease.

The swampbuster provision, in conjunction with the Tax Reform Act of 1986, eliminated or reduced many of the remaining indirect federal incentives for wetland conversion and helped improve consistency in federal policy towards wetlands. However, the geographic distribution of program participation relative to wetlands and changes in participation over time in response to commodity prices limit how effective the swampbuster provision will be at protecting wetlands. Some refocusing of wetland acquisition and leasing programs may be needed if protecting remaining wetlands from conversion to agricultural production is a public policy goal.

Thank you very much, Mr. Chairman. I will be happy to answer any questions that you or the Subcommittee members may have.

REFERENCES

Frayer, W.E., T.J. Monahan, D.C. Bowden, and F.A. Graybill. 1983. Status and Trends of Wetlands and Deepwater Habitats in the Conterminous United States, 1950's to 1970's. Colorado State University, Dept. of Forest and Wood Sciences. Fort Collins, CO.

Heimlich, R.E. 1988. The Swampbuster Provision: Implementation and Impact. in Stuber, P.J., coord. Proceedings of the National Symposium on Protection of Wetlands from Agricultural Impacts. Biological Report 88(16). U.S. Department of Interior, Fish and Wildlife Service. pp. 87-94.

Heimlich, R.E., and L.L. Langner. 1986. Swampbusting: Wetland Conversion and Farm Programs. AER-551. U.S. Department of Agriculture, Economic Research Service. Washington, DC.

Table 1. Wetlands by Swampbuster effectiveness, selected States

State	Wetlands Subject to Agricultural Conversion: Ratio of Government Payments to Net Farm Income: Greater than 1.00	1.00-.50	.50-.25	Less than .25	Total Subject Wetlands	Total 1/ Wetlands
	Thousand acres					
Nebraska	311	55	62	25	453	1,037
Alabama	242	416	246	895	1,802	3,801
Georgia	153	82	0	489	724	5,157
S. Carolina	128	89	108	17	340	3,493
Arkansas	145	148	28	299	618	1,328
N. Dakota	88	1,642	48	0	1,778	2,008
Texas	88	70	35	188	381	2,880
Mississippi	58	4	288	224	553	2,885
Louisiana	54	36	170	300	560	5,775
Minnesota	0	1,614	3,136	198	4,868	4,078
S. Dakota	0	41	432	82	555	1,592
Virgina	0	0	0	0	0	1,347
Maine	0	0	0	0	0	1,880
New York	0	0	0	0	0	2,506
Wisconsin	0	0	20	0	20	5,240
California	0	0	0	38	38	1,338
Michigan	0	0	0	420	420	3,871
N. Carolina	0	0	0	911	911	2,906
Florida	0	0	0	1,628	1,628	7,854
All others	458	187	198	557	1,321	16,883
Total	1,727	4,302	4,768	6,283	17,080	78,385

Source: Heimlich; using 1982 National Resources Inventory data.
1/ Includes nonfederal rural wetlands inventoried in 1982.

Figure 1

Swampbuster performance analysis, sanction effectiveness

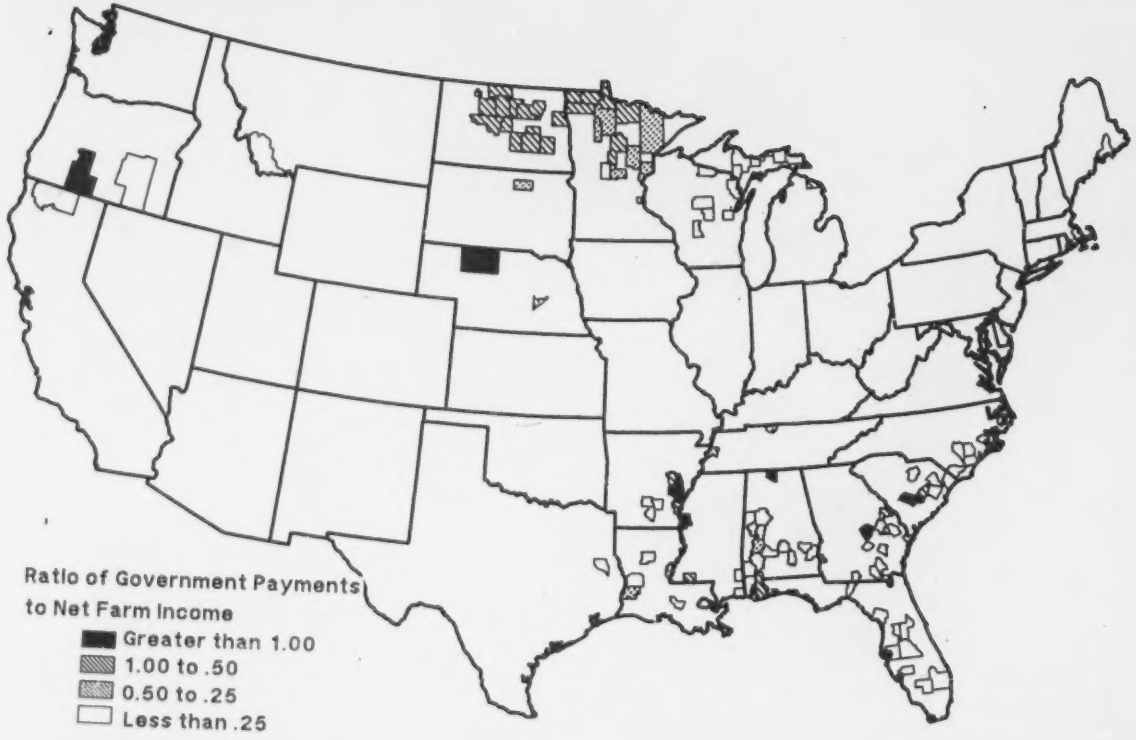
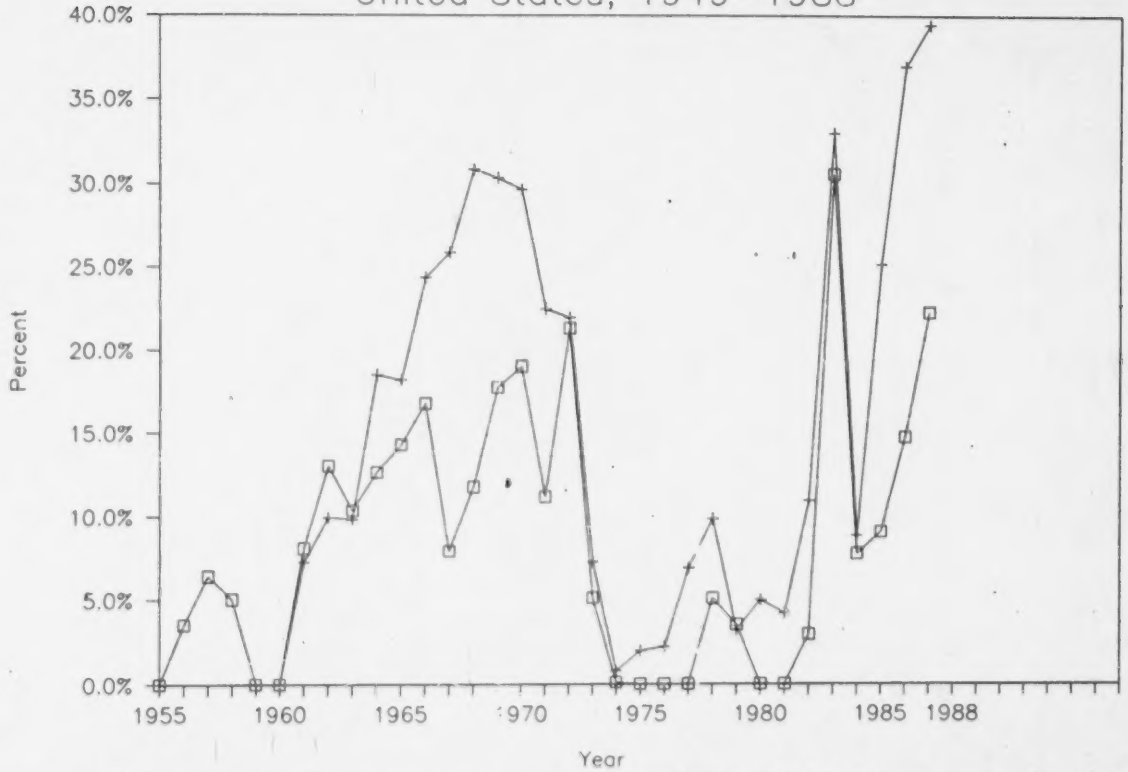


Figure 2. Farm Program Participation
United States, 1949–1988



THE NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

STATEMENT ON
AGRICULTURAL IMPACTS ON WETLANDS

BEFORE
THE HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES
SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

MAY 17, 1989

KEY RECOMMENDATIONS

Establish a no overall net loss goal for wetlands in a reasonable manner.

Improve incentives to private sector land owners to protect wetlands.

Vest state and local governments with wetlands protection authority.

Mr. Chairman, Members of the Subcommittee, the National Association of Conservation Districts appreciates the opportunity to provide you with some thoughts on the interrelationships of agriculture and wetlands.

NACD represents the almost 3,000 conservation districts and 17,000 men and women who sit on district governing boards. Conservation districts are an idea born at a previous time when our environment was threatened. During the Dust Bowl days, federal and state governments were struggling with how to reduce soil erosion from agricultural lands. Conservation districts were developed as units of state government, organized at the local level, and charged with developing a local program to control soil erosion. In the ensuing fifty years, district have grown to become the lead local agency in finding practical solutions to many of our resource conservation problems.

The primary issue this subcommittee is exploring today is the impact of agriculture on our wetlands resources. Before I make some recommendations on how to address the agriculture/wetlands issue for the future, I want to take a moment to examine the historical record.

The most recent study produced by the US Fish and Wildlife Service shows that 80% of the wetlands conversions taking place between 1955 and 1975 were due to agricultural activities. While there have been some questions raised in the past as to the accuracy of these data, NACD believes that we should accept this study as the best information available. However, in accepting that agriculture has been the largest single converter of wetlands, we are also forced to look at the reasons for these conversions to truly understand why the industry has had such an impact on wetlands.

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Dating back 200 years ago to the inaguration of our first President, this country and its citizens have relied on our land and natural resources to fuel our national growth and economic health. Throughout most of our national history, we have looked on wetlands as "waste" areas, not adding to our country's wealth. This line of thinking resulted in government policies that encouraged farmers to convert wetlands to some "productive" use. We provided the agricultural community with money and technical assitance to drain individual sites. We developed large-scale watershed projects to turn vast areas of wetlands into land capable of producing crops. We covered up wetlands with resevoirs to harness floodwaters and to provide steady water sources. We built dikes and channels to foster use of rivers as transportation corridors without considering direct and indirect impacts on the wetlands resources. At the time, all of these activities were part of national priorities to increase the productiveness of our land resources.

Then we became better educated as a whole. We began to realize the wetlands were in themselves a means to reduce flooding damages. We came to understand that many of our wildlife and fishery resources depended on wetlands to exist in abundance. We now understand that wetlands are an integral part to watershed hydrology for their ability to cleanse the surface waters and replenish groundwater. This new knowledge and understanding did not come over night, but grew over time. In our world today, we now understand that we need to provide protection to wetlands resources. The question that we now face is how to accomplish this protection.

SETTING A NATIONAL GOAL OF NO OVERAL NET-LOSS OF WETLANDS

Our first step, as outlined in the Report of the National Wetlands Policy Forum, is to begin today to slow, then stop, and finally to reverse the trend in declining wetlands resources. NACD supports this goal, yet also we know that it will not be accomplished today or even tommorrow. We have spent two hundered years to get were we are today in terms of wetlands resources.

A first step to reaching our final goal of increasing wetlands resources will be to bury the past. I don't mean to forget that we made mistakes in our national handling of wetlands, but rather to admit that hindsight allows us to better understand wetlands management and to provide direction for the future. NACD believes that we use today as our starting point of a new and enlightened era of wetlands management. We do not benefit from continuing to try and assign blame for past activities. We will benefit from learning our history lesson and applying it to the future.

NACD also strongly believes, as stated in the National Wetlands Forum Report, that establishing a "no overall net-loss" goal does not mean that every existing wetland is untouchable. We are going to have continued losses from natural causes. Because wetlands work as natural silt traps, we can assume that some will become filled up in the future. In addition, there will continue to be national, state, and local priorities that may out-weigh protection of a specific wetland. Our goal should be to recognize that these conversions will occur, but that our goal will be to ensure that the amount is reduced and that conversions will be compensated for.

As a first step, NACD believes that the federal government, in partnership with state and local governments and private organizations, needs to accelerate a wetlands research and education program. The research program

will need to address our technology for replacing lost wetlands. This could be accomplished through both restoration of previously converted areas or creation of new wetlands areas. Until the technology for these activities is developed, there is no way we can possibly reach an equilibrium status let alone an increase in wetlands resources.

Once the technology is developed, it will have to be put into the hands of the people who can utilize it - the land managers. We will have to develop technical guidelines and methodologies that will allow land managers to actually do the restoration and creation projects.

PROVIDING INCENTIVES FOR WETLANDS PROTECTION AND ENHANCEMENT

Of the almost 100 million acres of wetlands in this country, approximately two thirds are in private ownership. This situation sets up a natural conflict. Wetlands are seen as resources valued by the public for their myriad values, yet their management is dependent on individual private land owners. We have the public calling for wetlands protection and the private land owner asking who is to pay for providing this resource. The private sector is asking if they must bear the full cost of providing a public resource.

NACD does not believe that the simple solution lies in stricter regulation of land uses. While Section 404 permits have in all liklihood slowed conversions since passage of those amendments, they have not been able to halt all wetlands conversions. Even if some of the questions involving Corps of Engineers jurisdiction over isolated wetlands are resolved by Congress, there remains the problem of physically enforcing a regulatory program on 100 million acres of wetlands spread throughout the country. Instead, NACD believes that we, public and private sectors, need to work together to develop and make available incentives that encourage proper stewardship of wetlands resources.

Perhaps the most obvious answer in the incentive arena is direct payments to the land owner in return for guarenteed protection of the wetland. There has been a great deal of talk, including a recommendation from the Wetlands Policy Forum, of establishing a land rental program similar to the Waterbank or Conservation Reserve Programs to protect wetlands. One major difference would be that annual payments would apply toward purchase of a permanent easement as opposed to ten-year contracts. However, this approach presents some problems that are significant.

How do we determine the value of each wetland? There are some estimates that about 50% of the waterfowl in this country are dependent on 5.3 million acres of pothole wetlands for their continued survival. At the same time, the Fish and Wildlife Service estimates that duck hunters spent over $600 million on their sport in 1980. Does that mean that the 5.3 million acres of prairie potholes is worth $300 million or $60 per acre every year? And if that is the value we assign to these wetlands, who is willing to pay this fee to land owners every year? This figure reflects only waterfowl hunting values and does not count the additional values such as flood protection and ground water recharge. So we are still left with the question as to what is the value of each acre of wetlands? Additionally, we'll need to figure out a way to make this value available to the land owners in a useable form.

I will assume for today's purposes that some type of easement rental or purchase program will be developed to provide some of the incentives for wetlands protection. However, we know that fiscal constraints will make it impossible to protect every wetland through purchase of easements. I want to take a moment to explore some other, less obvious sources of protection incentives.

Earlier I talked about developing the technical expertise to provide a means to restore and create wetlands. That expertise is in itself an incentive to protect wetlands. To illustrate, let me use a real-life example from the prairie pothole region of North Dakota. There are many depressions that hold water for a week to ten days longer than the rest of the field. To wildlife experts, they ephemeral wetlands important to migrating waterfowl. To the farmer, these are nusance wet spots which cause havoc and delay at planting time. Now, in addition to the traditional management problems created by these areas, they are causing problems with meeting soil conservation requirements.

You see, this farmer is supposed to implement a reduced tillage system on the fields to reduce wind erosion to required levels. To implement this system effectively, the wet areas must be drained. Now this farmer is faced with three options. One, drain the wet spot and apply the reduced tillage management system. The farmer will then be out of compliance Swampbuster but meet conservation compliance requirements. Two, this farmer protects the wetland and does not put the reduced tillage system in place. Again, out of compliance. Thirdly, this farmer can protect the wet area, and introduce the reduced tillage system. While he meets compliance requirements, the crop does poorly and he suffers financially.

However, if we give this farmer the option of recreating this ephemeral wetland at the edge of the field, he could protect the wetland, meet conservation compliance requirements, and ease his land managment problems. In order to allow this option, we need not only the technology, but also the regulatory freedom to manage our resources correctly and efficiently.

This is but one example of incentives needed to protect wetlands in private ownership. We need to look closely at tort liability laws, income tax law, property tax law, federal farm programs, etc. NACD believes the incentives are out there that will encourage the farmer to protect wetlands. We simpley need to enact them into law and make them available to the people who hold title to wetlands.

DEVELOPING STATE AND LOCAL WETLANDS PROTECTION PROGRAMS

The last recommendation NACD has is to vest the states with the wetlands protection authority. Current federal efforts, predominately the Section 404 permit program, have had limited success in either protecting the resources or meeting the needs of the land owner. Part of the problem lies in confusing and inconsistant application of the regulations. Section 404 currently has two federal agencies, with hardly compatable missions, charged with administering the program. EPA and the Corps of Engineers have spent years and untold manhours attempting to come to a common agreement on operation of the program. Yet, for all of this effort they still appear to be far apart on how the program whould operate.

Also working against success of a federal program is the lack of a field staff sufficient to meet the program's needs. Is it any wonder that a program is unsuccessful when you have situations where the nearest Corps office to the Milk River valley of Montana is in Omaha, Nebraska, 1,200 miles away? One answer to this problem is to either greatly increase federal expenditures and open more offices. Another is to authorize the states to run the program.

There are other issues besides proximity of offices and staff sizes which make the states and local governments better entities regulate wetlands activities. By being closer to the resources concerned, state and local governments understand better the pressures placed on our resources. Knowing these pressures is half the battle to finding solutions to resource conflicts.

Additionally, there exists in many parts of the country an inherent distrust of federal regulatory programs. The people of rural America see these programs as an intrusion into their way of life by an agency that doesn't understand or sympathize with their problems. Giving the wetlands authority to the states means the wetlands owner will be dealing with an agency that understands the local pressures and knows about possible alternatives that may not occur to a far-off enforcement agency.

Mr. Chairman, my goal today was to provide you with some thoughts about how we as a country can manage our wetlands resources. Conservation Districts try to look for the solution, whether traditional or not, for all of our resource concerns. I will offer this committee NACD's assistance in any possible way to find a workable solution to our wetlands protection problems. Thank you.

The Conservation Foundation

STATEMENT OF

THE NATIONAL WETLANDS POLICY FORUM

before the

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION

AND THE ENVIRONMENT

OF THE HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES

on

WETLANDS CONSERVATION

May 17, 1989

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Affiliated with World Wildlife Fund

Wetlands Conservation

Statement of
The National Wetlands Policy Forum
before the
Subcommittee on Fisheries and Wildlife Conservation
and the Environment
of the
House Committee on Merchant Marine and Fisheries

May 17, 1989

Thank you for the opportunity to present the views of the National Wetlands Policy Forum on wetlands conservation to the Subcommittee on Fisheries and Wildlife Conservation and the Environment.[1]

The National Wetlands Policy Forum: Process and Product

The National Wetlands Policy Forum began about two years ago, when Lee Thomas, then Administrator of the Environmental Protection Agency, approached The Conservation Foundation to convene a dialogue on how EPA and the nation could better manage and protect its valuable wetlands resources.

The time was right to move beyond the polarization of the last two decades toward a broader consensus. Wetlands management had become, for all interests involved, a major frustration. As a nation, we no longer view wetlands as wastelands, but our

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[1] This statement was prepared by The Conservation Foundation on behalf of the National Wetlands Policy Forum.

nation's current wetlands policies are ineffective both in protecting these precious resources and in encouraging compatible uses. In short, current programs are too cumbersome and the responsibilities too diffuse to guarantee anyone -- landowners, the regulated community, conservationists, or even the regulators themselves -- consistency, predictability, timeliness, or effectiveness.

Section 404 of the Clean Water Act, passed in 1972, is the only federal wetlands regulatory program. It deals chiefly with only one aspect of the problem -- the disposal of dredged or fill material in wetlands -- which actually contributes to only a small percentage of overall wetlands losses in this country. A number of other special-purpose regulatory programs exist. Yet each of these typically addresses only a fragment of the issue.

Most coastal states have coastal wetlands protection programs; at least fourteen states also have inland wetlands protection laws. But there often is little effort to coordinate the policies or implementation of the different programs at either the federal or state level. Landowners seeking to determine the answers to seemingly simple questions such as whether a permit is required for activities on their land could be faced with considerable confusion and delay. Moreover, some government programs themselves directly or indirectly continue to cause wetlands losses.

This confusing patchwork of programs has generated substantial frustration and uncertainty, and often imposed significant costs on wetlands owners and users. It is a system in which armies of lawyers may spend months, perhaps even years, battling over the fate of a couple dozen acres, while hundreds of thousands of acres are disappearing virtually unnoticed.

Lee Thomas was right: the nation needed to take a careful, comprehensive look at the issues. This then was the agenda of the National Wetlands Policy Forum: to develop sound, broadly supported recommendations for improving federal, state and local wetlands policy.

On November 15, 1988, the Forum released its report and recommendations at a standing-room-only press conference in Washington, D.C. The report, entitled "Protecting America's Wetlands: An Action Agenda," was the product of a year-long, consensus-building effort. Participating as members of the Forum were three governors -- Thomas H. Kean of New Jersey as chairman, Carroll Campbell of South Carolina and Booth Gardner of Washington; the president of the Wyoming State Senate; the heads of state agencies from California and Alaska; a town supervisor from New York; four corporate CEO's -- two from development companies and one each from the timber and petroleum industries; the heads of four environmental groups -- National Audubon Society, National Wildlife Federation, Environmental Defense

Fund, and Nature Conservancy; three farmers -- one each from Louisiana, Illinois and the Prairie Potholes; and two distinguished academics.

These individuals, representing interests that have often been at odds over wetlands policy, worked together to reach consensus on a comprehensive set of recommendations.

In addition to the Forum members, Lee Thomas and the assistant secretaries of the four other federal agencies involved in wetlands protection and management -- the U.S. Army Corps of Engineers, the Department of the Interior, the Department of Agriculture, and the Department of Commerce National Oceanic and Atmospheric Administration -- participated as ex-officio members.

Forum members were assisted by their own personal staff representatives, by The Conservation Foundation staff, and by a group of nationally-renowned science and policy advisors. The Forum met four times between July 1987 and July 1988, with five additional meetings of the staff representatives. To gather input from a larger group of interested organizations and individuals, in May of 1988, the Forum also sponsored public workshops in Washington State, New Jersey, and Louisiana. More than 600 people attended these meetings.

The Forum's final report includes over 100 recommendations for action by federal, state and local governments and the private sector. The recommendations cover both promoting better private and public stewardship through nonregulatory approaches and improving the effectiveness and efficiency of our regulatory programs. The scope of the Forum's recommendations reflects the fact that many wetlands losses occur outside the scope of current regulatory programs. Also, by covering a broad range of issues, the Forum was able to enlist the participation and support of a variety of diverse interests -- as different interests clearly are concerned about different problems.

The Forum's recommendations are organized as an eight-point plan:

1. Establish a national goal to guide all wetlands protection and management programs;

2. Emphasize the importance of planning for wetlands protection and management;

3. Increase incentives for the wise management and protection of wetlands in private ownership;

4. Modify wetlands regulatory programs to provide more effective protection while reducing unnecessary frustrations and delays imposed on wetlands owners;

5. Provide improved government leadership for the nation's wetlands protection efforts;

6. Improve the quantity and quality of information about wetlands available;

7. Expand efforts to restore and create wetlands to enhance and increase the nation's wetlands inventory; and

8. Ensure adequate funding and other resources necessary to implement an effective national wetlands protection and management program.

The Wetlands Issue

The National Wetlands Policy Forum was created because the status quo in wetlands protection is unacceptable. Conversion of wetlands -- for farming, for urban and suburban development, for oil, gas and timber development, and for public projects like dams and canals -- reached nearly one-half million acres a year over the past few decades. All told, we have lost more than half of the wetlands which existed in the continental U.S. when this nation was created. Nearly 100 million acres of wetland have been converted to other uses. To put this in context, 100 million acres is twenty times the size of the state of New Jersey, and just a little smaller than California. California has less than 10 percent of its original wetland base, Iowa less than 5 percent. Louisiana is losing 50 square miles of wetlands a year due in large part to channelization and flood control activities.

Wetlands are considered by many to be the living resource nurseries of the nation. They are often areas of extremely high productivity, producing acre for acre five times the biomass of a corn field for a wide variety of species dependent upon them for their survival. Wetlands provide spawning grounds and habitat for 90 percent of the annual United States commercial fish catch

and support complex food chains. Wetlands have been called "duck factories" for the valuable role they play in providing habitat and food for migratory waterfowl. A third of threatened or endangered species are dependent on wetlands for their survival.

Because wetlands provide essential habitat, they increase the economic and recreational benefits of those areas through activities such as hunting and fishing. Wetlands provide other valuable economic functions as well. They help prevent soil erosion, and in so doing save millions of dollars annually. Wetlands recharge underground aquifers and provide a natural means of flood control and water purification by retaining water during periods of peak runoff and then releasing that water gradually, absorbing nutrients in the process. Wetlands remove heavy m als from water by trapping them in sediment, and reduce acidity by buffering acid mine drainage seeping from active or abandoned coal mine sites.

But not least of all, wetlands provide what <u>can</u> be called recreation, but which should really be called contemplation -- they provide some of the most beautiful, quiet, natural places in America. In today's world, that's not a value we should ignore.

In focusing on the critical ecological functions of wetlands, we do not mean to imply that conversion of wetlands has not produced other benefits, or that it has been undertaken for

no reason at all. Our farms provide food and fiber for people around the world. Suburban homes and coastal developments are in great demand as our population grows. Water resources projects can help ensure adequate supplies of clean, fresh water. And, in many cases, oil, gas, and timber are located in or over wetlands, making their exploration without wetlands alteration difficult or impossible.

Thus, the protection of our nation's remaining wetlands provides a clear example of one of the greatest challenges facing policy makers today: how best to meet the twin goals of economic growth and environmental protection. Far from being mutually exclusive, economic growth and environmental protection are mutually dependent.

In convening the Forum, Governor Kean and then-Conservation Foundation/World Wildlife Fund President Bill Reilly worked carefully to ensure that both environmental and economic concerns were well represented. All major interests -- including timber, oil and development firms, farmers, state, federal and local officials, environmentalists, and academics -- were included.

This broad representation makes the consensus reached by the Forum truly significant. All sides recognized their mutual interest in developing a fair and workable system, but one which provides real protection to wetlands.

Establishing a National Goal

One of the primary conclusions of the National Wetlands Policy Forum was that our current wetlands protection efforts, from the Section 404 permitting program, to Swampbuster, to the acquisition of wildlife refuges, are uncoordinated, unfocused and less effective than they could be. Perhaps the most important single recommendation of the Forum is that the nation should adopt a clear and unequivocal goal to guide its wetlands policies.

Although the Clean Water Act contains an overall goal for the nation's waters ("To restore and maintain the chemical, physical and biological integrity of the nation's waters"), the Forum recognized that the nation's wetlands programs deserve more specific guidance. We concluded that, without a clear goal, wetlands programs will continue to be inconsistent and unfocused. The Forum recommended that:

> The nation establish a national wetlands protection policy to achieve no overall net loss of the nation's remaining wetlands base as defined by acreage and function, and to restore and create wetlands, where feasible, to increase the quality and quantity of the nation's wetlands resource base.
>
> Interim goal:
>
> To achieve no overall net loss of the nation's wetlands remaining resource base.
>
> Long-term goal:
>
> To increase the quantity and quality of the nation's wetlands resource base.

The Forum further stated:

> Although calling for a stable and eventually increasing inventory of wetlands, the goal does not imply that individual wetlands will in every instance be untouchable or that the no-net-loss standard should be applied on an individual permit basis -- only that the nation's overall wetlands base reach equilibrium between losses and gains in the short run and increase in the long term. The public must share with the private sector the costs of restoring and creating wetlands to achieve this goal.

Adoption of this goal in national legislation will send a clear signal that the continuing loss and degradation of the nation's wetlands is not acceptable. The two-part nature of the goal provides an ideal scheme for developing and evaluating programs. The interim goal of no net loss sets out a defined, measurable objective. Within that context, the goal provides flexibility to allow critical projects with unavoidable wetlands losses to proceed, if compensated by creation of new wetlands or restoration of degraded areas. The Forum recognized that, although the goal will require a significant reduction in the rate at which wetlands are altered, alterations cannot be stopped entirely. Some alterations occur naturally, others result from past human actions, and some unavoidable losses result from beneficial human activities.

As the Forum notes, the no overall net loss goal should not necessarily be applied on a permit-by-permit basis, nor should it be based solely on a national average of wetlands loss. However, the phrase must have sufficient content to guide regulatory

agencies in their activities, so that when individual permitting decisions are accumulated, no overall net loss of wetlands is achieved within the regulatory program. This will mean that some of the "mitigation" allowed in the past, such as acquisition of existing wetlands, would no longer be sufficient.

The longer term aspect of the goal -- increase our wetlands resource base -- reminds us that we cannot be satisfied with stopping wetlands loss. We have allowed serious degradation of a critical environmental asset, and we must work to restore that asset.

The concept of no overall net loss clearly must be further developed as we move into implementation of the Forum's recommendations. The goal statement is a critical yardstick against which to measure the success of state and federal wetlands protection programs. A sophisticated methodology must be developed to account for wetlands losses and gains not only on an acre-by-acre basis, but according to some measure of functional equivalency.

An important implication of the no net loss goal is that a variety of tools are necessary to achieve our wetlands protection objectives. We cannot presume that regulatory efforts, tax preferences and incentives, or research and demonstration efforts

alone will enable us to meet our goal. All of these tools are critical.

Meeting the Goal

One of the Forum's insights was that, even if we called an immediate halt to every current activity affecting wetlands, wetland losses would continue due to natural change and as a result of past human activities. To achieve the Forum's goal, and to allow for future public needs, the nation is going to have to restore some wetlands that have already been altered. The Forum recommended several initiatives in this area, including a cooperative public/private Wetlands Restoration Initiative to restore wetlands on federally owned lands and in places affected by federal projects. We also recommended that the mission statements of various federal agencies, such as the Bureau of Reclamation, be changed to include wetlands restoration and creation.

To carry out these restoration initiatives will require significantly more scientific information about how these complex and ecologically sensitive systems function. The scientific uncertainty surrounding this subject is a major impediment to efforts to develop well-founded mitigation policies and to make informed decisions about restoration and creation projects for their own sake.

No management and protection system can be better than the information upon which it is based. This is particularly true in the case of wetlands. We need better information about how these natural systems operate, how they perform their diverse functions, how to measure these functions, and how they are affected by various activities. Better information is needed also because it is irresponsible to continue the current rate of wetlands conversions and fail to develop a reliable information base with which the environmental and societal impacts can be evaluated.

The Forum supported a wide variety of roles for the private sector in wetland protection and management. The Forum did not assume that every problem could or should be solved by government regulation. The Forum strongly endorsed the increased and coordinated use of compatible economic uses and other economic incentives to encourage landowners to manage, protect, restore, and enhance the wetlands resources that they own.

The Forum strongly supports advanced planning for wetlands protection and management. Together with better mapping of the resource and information about their functional values, planning can identify areas that are more and less suitable for development. Planning can also identify promising sites for restoration of degraded wetlands to permit some continued conversions while helping achieve the no overall net loss goal. We believe that the Forum's recommendations for local- and state-initiated

planning, with coordination by federal agencies, will provide the type of coordinated regulatory effort that will facilitate, rather than hinder, responsible development.

The Forum's recommendations for flexibility in local zoning also will help developers avoid or minimize impacts to wetland areas.

Without question, the law as currently written and implemented is not stopping the high rate of wetlands conversions in this country. One reason existing regulatory programs are not more effective is because they do not cover all activities which adversely effect wetlands. For example, under the Section 404 program, certain alterations, such as drainage, water diversion, and chemical contamination are not covered unless they also involve the discharge of dredged or fill material. Several federal programs control activities that may cause alterations; but the coverage of these programs is uneven, and the extent to which they have been, or could be, applied to wetlands protection is unclear.

The Forum concluded that wetlands regulatory programs can be improved in four ways. The first is consistently defining and delineating wetlands for regulatory purposes. The second is to adjust the implementation of existing regulatory programs to make them more effective at avoiding wetlands losses as well as at

reducing the unnecessary costs and delays they impose on wetlands owners. The third is to adopt more consistent and effective mitigation policies. And the fourth is to deal with types of alterations that are not now addressed adequately with either a regulatory or nonregulatory program. Mitigation policies and ways to deal with types of alterations not now addressed are described further in the following.

Current mitigation policies are not assuring that avoidable wetland losses do not occur, and instead are offering compensation for avoidable wetland losses as mitigation for converted acreage. Pursuing such a mitigation strategy means we will never achieve a "no overall net loss goal" let alone reverse the trend of wetland losses. For this reason, the Forum recommended that a policy of strict sequencing of mitigation must be adopted by both federal and state regulatory agencies so that wetland conversions are first avoided and then minimized before their loss is compensated for.

Further, federal regulatory agencies do not do a good enough job of monitoring and enforcing mitigation conditions on permits, so even when compensatory acreage is made the condition precedent of a particular wetland fill, there is no assurance that the proffered compensatory acreage will ever be restored or created. Therefore, the Forum recommended that permits, particularly permit mitigation conditions, be closely monitored and enforced,

and that resources be committed to these activities. While two recently concluded Memoranda of Understanding between the federal regulatory agencies on jurisdiction and enforcement may alleviate some of the current enforcement problems at the federal level, the Forum recognized the critical role played by the Justice Department in enforcement of illegal wetlands activities, and recommended that the Department devote increased resources as well to prosecution of wetlands violators.

Patching current regulatory programs, while certainly important, can only ameliorate some of the problems. The current regulatory focus can miss major causes of wetlands alteration. Therefore, the Forum recommended that federal and state regulatory programs explicitly address, if they do not now include, the following activities in wetlands: removal or excavation of soils; drainage or flooding; destruction of plant life; and driving of pilings and placement of other obstructions.

The Forum recognized that certain operations may involve these activities but, due to the size or nature of conduct of the operation, may not result in significant or lasting alterations of wetlands. The Forum recommended that regulatory programs recognize these differences in magnitude or duration of impact. The Forum also did not intend for this or any of its other recommendations to modify the existing exemptions from permitting

requirements extended to normal farming, silviculture, and ranching operations under Section 404(f) of the Clean Water Act.

Greater Role for States

A major recommendation of the Forum was that states should play a greater role in wetlands protection. With appropriate resources and legal authority, states are in an ideal position to implement much of the necessary planning and regulation.

States can employ detailed local knowledge of their specific wetland types and the particular characteristics of their economy or geography leading to wetlands loss. States are also likely to provide faster and more predictable decisionmaking, and are, in many cases, undertaking mapping and other assessment work already. States also operate many other environmental programs (both regulatory ones, such as those under the Clean Water Act and others, such as land acquisition) which should be considered in wetlands management decisionmaking.

As a first step, the Forum recommended states should develop comprehensive state wetlands conservation plans. These plans will provide the framework for creating a coordinated wetlands management program and for assessing progress in achieving our wetlands goals. They also will enable states to ensure that every unavoidable wetlands loss is balanced by corresponding gains.

The Forum recommended that states adopt tougher regulatory programs to ensure that all threats to wetlands are controlled. The regulatory components would include zoning restrictions and permitting programs. Non-regulatory programs, such as advanced identification under Section 404 of the Clean Water Act, education of wetlands owners, and acquisition of title or easements, are also essential.

One of the most common criticisms of the Section 404 program is that its implementation is fragmented between federal agencies. In addition, though it is possible to do so, few states have applied for delegation of the Section 404 program. Federal program fragmentation results in delays due to inter-agency communication problems, disputes over authority, and substantive disagreements. Lack of state assumption means that, in many states, two entirely separate programs -- the federal one and a state one -- are in place. This forces the private sector to negotiate two permit programs with differing substantive and procedural requirements and timetables.

In light of these problems, the Forum recommended that EPA increase its efforts in accordance with the Clean Water Act to delegate federal regulatory responsibilities to states that demonstrate that they have the authority and capability to achieve the recommended goal and that have undertaken the preparation of State Wetlands Conservation Plans demonstrating

how they will do so. The Forum also recommended that EPA exercise appropriate oversight over delegated programs to ensure that they are achieving their goals. Operation of the Section 404 program by states provides an opportunity not only to take advantage of the local knowledge and responsiveness of states. It also allows the private sector to deal with a single agency, rather than at least two federal ones and frequently, a state agency as well.

By allowing all permitting and regulatory activities to be conducted by one entity, much of the confusion, delay and frustration which has surrounded the 404 program could be alleviated. However, only one state has been able to assume responsibility for the 404 program over the past 17 years. Clearly, the system isn't working.

Without changes like the ones recommended here, many states otherwise willing to take on additional responsibility will choose not to. We will lose the opportunity to develop integrated protection programs designed around the specific wetlands types and threats found in each state, and we will lose an opportunity to provide a clearer, more predictable regulatory pathway.

Briefly, there are four major hurdles which have discouraged states from taking over 404. The Forum made several recommenda-

tions for how to deal with these. First, current rules prevent states from receiving permitting authority over all wetlands within their borders. Permits for activities in wetlands adjacent to navigable waterways must still be issued by the Corps. Therefore, the Forum recommends allowing delegation of all Section 404 responsibilities to the states, with the Corps rendering review and approval of permits involving navigation and defense. To ensure appropriate Corps review, it might be appropriate, as a condition of delegation, to require a state to enter a memorandum of understanding or similar agreement, specifying procedures for identifying such issues.

Second, unlike most other environmental programs which may be delegated, no resources are provided to states to assist in preparing for or operating the assumed program. To correct this deficiency, the Forum recommends that the federal government should provide financial and technical assistance to the states to help them prepare and implement the wetlands conservation plans and to carry out their delegated responsibilities.

Third, states are not now able to assume authority for permitting in one portion of their geographic area. The Forum recommended solving the problem by allowing states to assume discrete and clearly identifiable portions of the regulatory program rather than requiring that the entire program be delegated at one time.

And finally, the Forum recommended that federal actions be required to conform to approved state plans. This would be accomplished by requiring that federal actions be subject to a consistency review, similar to the one mandated by the Coastal Zone Management Act, in states with approved wetlands conservation plans.

Implementing the Forum's Recommendations

The members of the National Wetlands Policy Forum firmly believe the nation cannot afford to allow the present situation -- with its inadequate wetlands protection, its unacceptable delays and confusion, its costs and frustrations -- to continue. We recognize that wetlands protection is only one of many issues the nation is facing, but we believe that it clearly merits a higher priority than it has received in the past.

Thus, members of the Forum are working actively to encourage the implementation of its recommendations. Delay means continued losses -- lost public benefits as wetlands continue to be converted, lost economic energy stifled by inefficiencies in the current regulatory programs.

Many recommendations can be adopted immediately by federal and state agencies responsible for implementing the existing protection and management programs. We recommend that they do so and applaud such steps as the recent agreement on consistent

field procedures for defining and delineating wetlands for regulatory purposes, which was announced in January of this year by the U.S. Army Corps of Engineers, the Environmental Protection Agency, Fish and Wildlife Service and Soil Conservation Service.

To assure that the Forum's report does not become just another report on a shelf, its members recommend several actions. Specifically:

- The President should amend and reissue the existing Wetlands Executive Order to emphasize the importance of wetlands protection and to promote the adoption of the Forum's recommendations by all federal agencies.

- Congress should enact legislation that will, among other recommendations: establish the recommended goal as national policy, encourage delegation of federal wetlands regulatory programs to qualified states, establish such initiatives as Wetlands Preservation Trusts and an Agricultural Wetlands Reserve Program, and require the President to report to Congress every five years on the nation's success in achieving the national wetlands protection goal.

- And, Congress should provide adequate funding for existing programs and new initiatives alike.

To see this work through, the Forum has established an implementation subcommittee to work on getting its recommendations adopted. Members of the subcommittee are engaged in disseminating information to their constituencies and the public about the Forum's recommendations. They also have formed working groups to discuss specific issues in five areas: federal legislation, appropriations, the revised federal

executive order, the current federal regulatory program, and initiatives at the state level. The Forum as a whole will meet again this summer to review progress toward implementation of its recommendations.

Specifically, the implementation subcommittee is working on recommendations for a revised executive order on wetlands in anticipation of the formation of an interagency working group under the Domestic Policy Council as described in President Bush's budget message to Congress, in which he announced his intention to form such a group to redraft the existing executive order on wetlands. The thrust of our recommendations will be to provide direction regarding implementation of the Forum's recommended national goal.

Also, members of the Forum hope to be able to provide Congress with recommendations concerning existing wetlands programs that need increased funding. In some cases, these increased costs would be offset by savings in other government programs. In other cases, implementation of the Forum's recommendations would reduce the costs imposed on the private sector or would provide important public benefits.

Perhaps of most interest to the Fish and Wildlife Subcommittee is our work on a legislative proposal. At least twenty of the Forum's recommendations require legislative action;

others might benefit from incorporation into legislation. Some of the recommendations are sufficiently specific to be incorporated into legislative language; others, such as the recommendation to delegate the Section 404 regulatory program to the states, raise additional questions for discussion -- in this case what constitutes adequate authority and capability for delegation of the 404 program.

With the diverse interests represented on the Forum, this process requires the same thoughtful negotiation and consensus-building effort that went into the Forum's initial recommendations. Thus, it is taking time. But we believe it is time well spent. A legislative proposal that reflects the consensus of the Forum would be of great value. Although it is difficult to predict, our best estimate for completion of the draft proposal is mid-summer.

Conclusion

When the Forum started, many members were uncertain about what we could achieve. Many, frankly, were skeptical of any agreement. But by the time the report was finished, everyone involved was surprised and pleased at how much progress they had made and at the extent and usefulness of the recommendations. While each and every recommendation may not be ideal from each member's perspective, the Forum believes that the entire set of recommendations, taken as a whole, will significantly improve the

efficiency and effectiveness of the nation's efforts to protect and manage its wetlands. Thus, it is important to continue to work toward the balanced implementation of recommendations of concern to all interests during the process of implementing these recommendations.

We have been pleased to see increased attention to wetlands protection since the Forum presented its report and recommendations last November.

- o President Bush endorsed the no overall net loss goal in his budget message to the Congress.
- o The Environmental Protection Agency has prepared a Wetlands Action Plan for responding to the Forum's recommendations.
- o In February, the National Governors' Association adopted a National Wetlands Policy, proposed by Governor Kean, which encompassed many of the Forum's recommendations.
- o And in March, the National Association of Counties' Energy, Environment, and Land Use Committee also approved a resolution endorsing a no overall net loss goal.

Taken together, these actions provide a good start for building a coordinated, effective, and efficient wetlands protection and management program. But many of the steps that the Forum recommended require congressional action. The Forum explicitly noted the importance of amending federal law to

provide important elements of a framework for improved wetlands protection.

Adoption of the no overall net loss goal in federal legislation as national policy should be a first step. This goal will provide guidance for all wetlands policies and a yardstick with which to measure progress. Clearly, the Clean Water Act's Section 404 should be amended, both to enable states to take a more active role, and to provide for an improved baseline federal program. Regulatory programs that are reactive in nature will continue to be unequal to the tasks of protecting such a complex resource as wetlands. Programs which are inefficient in the utilization of financial and human resources will exert a drain on the nation's energies.

Action by Congress on these and other Forum proposals is critical, since it can provide the leadership, guidance, resources, and authority for actions by states, local governments, and the private sector. We recognize that the complexity of wetlands issues -- matched only by the complexity of congressional jurisdiction over these issues -- means that action will take time and statesmanship. This is all the more reason to begin as soon as possible.

All levels of government are facing tight budgetary constraints and must move cautiously on recommendations that

increase expenditures. In the case of wetlands resource management there is a need to improve the nation's "return on investment." We believe the Forum program represents this improvement.

Mr. Chairman, thank you again for the opportunity to provide the views of the National Wetlands Policy Forum. We pledge not only to work with you and other committees, but to help ensure that states, local governments, and the general public are made aware of the critical role they may play in wetlands protection.

United States
Environmental Protection
Agency

External Affairs (A-100AE)
Washington DC 20460

EPA

Legislative Analysis

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July 27, 1989

Honorable Gerry E. Studds
Subcommittee on Fisheries and
Wildlife Conservation and the
Environment
Committee on Merchant Marine
and Fisheries
U.S. House of Representatives
Washington, D.C. 20515-6230

Dear Mr. Chairman:

Enclosed are the responses to questions which you and Representative Jolene Unsoeld addressed to Mr. David G. Davis, Director, Office of Wetlands Protection, regarding the Environmental Protection Agency's wetlands program. These questions arose from hearing held on May 17, 1989.

I hope this information will be helpful to you and the members of the subcommittee. If there is any further information we may furnish you please do not hesitate to contact me.

Sincerely,

Barbara Blumenauer

for A. Henry Schilling
Director, Office of
Legislative Analysis

Enclosure

Questions Submitted by Congressman Gerry Studds
following the hearing on May 17, 1989

1. Question: The wetlands action plan your agency issued last year identifies seven steps you intend to take to implement the recommendations of the Wetlands Policy Forum. To what extent will these actions address the 80% of our wetlands losses that are not covered under the 404 program?

Response: EPA issued a short-term internal action plan in January 1989 highlighting actions we will take (using existing resources) to begin implementing certain recommendations of the National Wetlands Policy Forum applicable to our Agency. The plan outlines actions EPA will incorporate into its own water and other media programs to improve consideration, protection, and restoration of wetland functions. In addition, the President's Domestic Policy Council Wetlands Task Force is currently evaluating existing Federal wetlands activities and will develop coordinated Federal wetlands policy programs. The Task Force will also coordinate and assess implementation of the "no net loss" goal by Federal, State and local governments and the private sector.

It would be impossible to estimate what percentage of wetland losses could be addressed through EPA's current actions. In contemplating solutions to these losses, agricultural conversions are a significant problem deserving greater attention. EPA is working with the Department of Agriculture, and the Fish and Wildlife Service to improve the existing Conservation Reserve Program, Water Bank Program, and "Swampbuster" provisions to increase the wetlands protected and restored. In addition, this group will identify potential changes to the 1990 Farm Bill for those actions which cannot take place administratively.

Although EPA has a vital role to play in wetlands protection, management, and restoration, it is important to keep in mind the many other public and private groups which all must act in order to achieve a national goal or no net loss.

2. Question: Critics of the 404 program say that many wetlands are being destroyed with virtually no environmental review or mitigation as a result of the Corps of Engineers' use of general permits. It is argued, for example, that significant wetland losses have resulted from Nationwide Permit #26 which authorizes the filling of isolated wetlands that are smaller than 10 acres. Do you agree with that?

Recognizing that the Corps and the resource agencies are understaffed for the permit workload, what can be done to stop the substantial loss of wetlands through the existing general permit program?

Response: EPA believes that many of the Corps' general permits, including many of the nationwide permits, are appropriate in that they authorize activities which do in fact have minimal individual and cumulative impacts. However, we do agree that there is a possibility that some of these permits -- including Nationwide Permit #26 -- have the potential for and/or the effect of authorizing more than minimal wetland losses and should be examined by the President's Task Force.

EPA believes that there are a number of steps which could be taken to enhance the Section 404 program's ability to protect wetlands.

First, the general permit program should continue to be used for activities which do in fact have minimal individual and cumulative impacts. Perhaps even new general permits which meet this criterion could be developed. Further, it may be possible to develop general permits which include specific mitigation requirements for certain activities with more than minimal impacts. For example, the National Wetlands Policy Forum recommended consideration of such a general permit for relatively small discharges. That, or other, permits with built-in mitigation may be acceptable.

Second, EPA believes that the concept of "general denials" should be explored. This approach could eliminate the need for processing inappropriate permit applications for which a permit would almost invariably be denied (e.g., use of certain materials for shoreline stabilization).

Third, EPA believes that strict application of the Section 404(b)(1) Guidelines can reduce some of the agencies' workload. Requiring use of practicable alternatives in all cases, and ensuring that the applicant truly bears the burden of identifying alternatives and demonstrating that they are not practicable would likely result in a better understanding by applicants of the need for them to plan to avoid wetlands

in the first place. Further, requiring full compensation for unavoidable losses will re-emphasize that point. In addition, requiring applicants to post performance bonds, monitor their discharges and mitigation activities, and provide regular reports to the Corps and EPA should be explored as they might enhance voluntary compliance with permit conditions, and allow for better enforcement with less effort by the agencies. This could apply to general permits as well as individual permits.

Fourth, efforts outside the Section 404 program -- ranging from State wetland regulation programs to increasing Federal incentives for wetlands protection to decreasing wetland losses due to Federally - funded or -conducted activities to better public education about the importance of wetlands -- can result in greater wetlands protection in general, and allow the Section 404 program to be more focused on those areas where wetlands losses continue to be greatest.

We are continually evaluating ways in which the Section 404 program could be more efficient and effective, and will pursue these and any additional ideas we may have.

3. Question: A major recommendation of the Wetlands Policy Forum is to eventually give the states considerable control over wetlands protection programs. Under the current 404 program, the states can assume control over the program, with EPA oversight.

Based on your experience with the Clean Water Act, what do you see as the advantages and disadvantages of states assuming control over the 404 program?

Answer: The vast majority of EPA programs are administered by the States, including the water programs. State assumption of the wetlands protection program under the Clean Water Act would allow the States to incorporate wetlands considerations into their other programs. This could potentially provide for greater scope of the 404 program. Regarding time and resources, some States have existing field staff that could be enhanced to protect wetlands while accomplishing other State water programs. However, many States will have to establish new programs that will require substantial staff and funding. We view the States as generally the appropriate level at which to monitor progress toward the President's goal of no net loss of wetlands. When viewed strictly from a 404 assumption standpoint, current law only allows the States to assume a portion of the Federal Section 404 program (only waters of the U.S. other than those subject to the ebb and flow of the tide and those waters used for transport of interstate or foreign commerce and adjacent wetlands). However, States can -- and in many cases have -- established strong coastal and inland wetland protection programs that compliment the 404 program. North Carolina is a model of such an approach where there is a very strong coastal wetland protection program that allows activities to go forward under a Corps of Engineers general permit, provided that the applicant has satisfied the State permit requirements. Therefore, the States' ability to monitor progress toward the goal of no net loss will largely depend on the extent of their programs -- those states that rely on 404 assumption will be somewhat limited, while those with a broader program that compliments Section 404 may be quite comprehensive.

Questions submitted by Representative Jolene Unsoeld
following the hearing on May 17, 1989

1. Question: For FY 86-89, how many Section 10, 404, and 10/404 Corps public notices were received? How many received no action? How many received no objection? For how many did EPA recommend modifications? For how many did EPA request denials? For how many that EPA requested denials, did the Corps deny the permit? How many projects were covered by Nationwide or Statewide general permits?

For FY 86-89, please provide the same numbers for Region X which includes the State of Washington. In addition please provide a list of wetlands protected from filling through EPA's 404(c) authority in Region X from FY 78-89.

Response: EPA considers each public notice that is submitted by the Corps. However, the level of the review varies depending on the magnitude of the proposed project. An analysis of the EPA data (which does not include Section 10 permits) submitted by the ten Regional Offices during the period of FY 1986-89 (first and second quarters of FY 89) reveals the following:

Of the permit reviews initiated by EPA, approximately 26% raised significant issues. Of this universe, the data indicate:

- 64% of the resolutions involved Corps action which satisfied EPA concerns, leading to permit issuance.
- 12% of the resolutions were due to Corps satisfaction of EPA concerns, resulting in permit denial.
- 10% of the resolutions involved the Corps issuance of the permit over EPA recommendation for denial or without inclusion of EPA recommended modifications of permit conditions.
- 14% of the resolutions were due to the applications being withdrawn.

In EPA Region X during FY 1986-89, of the permit reviews initiated, 20% raised significant issues. Of this universe, the data indicate the following:

- 69% of the resolutions involved Corps action which satisfied EPA concerns, leading to permit issuance.
- 17% of the resolutions were due to Corps satisfaction of EPA concerns, resulting in permit denial.
- 5% of the resolutions involved the Corps issuance of

the permit over EPA recommendation for denial or without inclusion of EPA recommended modifications of permit conditions.

- 9% of the resolutions were due to the application being withdrawn.

To date, EPA Region X has initiated the Section 404(c) process on one occasion, and a compromise was reached between EPA and the applicant resulting in the issuance of a permit addressing EPA concerns. The case involved construction of an ARCO oil processing facility in wetlands on Alaska's North Slope in 1985 (the "CPF-3 Project").

The following chart represents data collected by the Corps for Section 10, 404, and 10/404 permit applications. In addition to individual permit actions, the Corps now estimates that over 50,000 activities are covered by Nationwide permits. In 1987 and 1988, the Corps estimated that 21,000 activities were covered by either Regional or Statewide general permits. It is likely that a significant amount of wetlands and other waters of the U.S. are lost as a result of these general permit activities.

CORPS PERMIT ACTIVITY: SECTION 10, SECTION 404, SECTION 10/404
FY 1986-89

	1986	1987	1988	1989*
Applications Received	14,400	14,400	15,500	7,500
Applications Withdrawn	3,000	3,300	3,500	1,700
Permits Issued	7,800	7,000	7,000	3,300
Permits Denied	479	477	472	250
Letters of Permission**	2,500	2,800	3,300	1,500

* First and Second Quarters Only
** Letters of Permission are not public noticed

2. Question: Region X EPA has had in place a no net loss of wetlands policy since 16 August 1984. Please provide a summary of the acreage of wetlands filled in Region X since August 1984 and the acreage of wetlands created or enhanced. Please provide a summary of the wetlands functions which have been lost due to filling since August 1984 and the wetlands functions which have been created or enhanced.

Response: Recognizing that difficulties exist in accurately tracking wetlands losses and gains, Region X has estimated that 1,075 acres of wetlands were lost and 590 acres of wetlands were created or restored from FY 1985 through FY 1987 in Region X (excluding Alaska) as a result of the Clean Water Act Section 404 permit program (comparable data for the Region is not available after FY 1987). It is important to note that the data examined to generate these numbers includes only those projects that received an individual permit under Section 404 (i.e., discharges of dredged or fill material into waters of the United States). In addition, it is likely that significant areas of wetlands were also lost without any associated compensatory mitigation measures as a result of the Section 404 general and nationwide permit process, as well as the many activities not regulated under Section 404 (e.g., drainage, landclearing) that result in wetlands losses.

Although we believe that the no net loss goal of wetlands should appropriately be measured in terms of both acreage and function, an efficient method of tracking the impact of projects on wetlands functions in the Section 404 permit program has not yet been developed. EPA will, however, be working with other federal agencies in the future to develop appropriate means to monitor the nation's gains and losses of wetland functions and values.

3. Question: I am concerned about the process and recommendations of the National Wetlands Policy Forum. If EPA no longer reviews individual permits, as set out on page 22, what Federal role is left to protect our nation's wetlands?

Response: A basic premise of the Forum report is that each level of government and even the private sector must take active roles in order to meet the Forum's goals for wetlands. Indeed, a majority of the Forum's recommendations are directed to the federal agencies. The federal government must play an essential leadership role. The types of activities needed from federal agencies include: technical and financial support and training; research, inventory, and trends analysis; proper management and restoration of wetlands on federal property; acquisition and restoration efforts (including joint public/private protects); leadership in federal agency actions and projects consistent with the goals of the Forum; and implementation or oversight of regulatory programs.

The federal government currently plays a significant role in major wetlands-related programs such as the Section 404 Clean Water Act and the provisions of the 1985 Farm Bill. The Forum recommends specific changes to these programs and encourages a greater role for states in the Clean Water Act regulatory program; however, the federal role remains a critical one. Because of the magnitude of some wetland problems, the interstate or even international significance of some wetland systems, and the need for consistency across states, a federal role must remain within the regulatory arena. The specific recommendation you refer to on page 22 of the Forum report supports this federal role. Although it does not call for oversight on every permit, it calls for the state and EPA to define an agreement upfront regarding which permits may need federal review to minimize oversight burdens or delay while not sacrificing a consistent level of environmental protection. The Forum calls for EPA oversight to be conducted in a manner which ensures that when a state assumes the regulatory program, it will also achieve the goal. This level of EPA review is, in fact, the level that is already incorporated into the existing Clean Water Act delegation process and EPA's implementing regulations. As such, it does not represent a departure from current policy and practice.

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